

- ALL PAVING, CONCRETE CURB, GUTTER AND SIDEWALK SHALL BE FURNISHED AND INSTALLED IN ACCORDANCE WITH THE DETAILS SHOWN PER SHEET C8-1 AND THE REQUIREMENTS OF THE CITY. SEE LANDSCAPE PLANS FOR ANY ADDITIONAL HARDSCAPE APPLICATIONS
- MINNESOTA STATE STATUTE REQUIRES NOTIFICATION PER "GOPHER STATE ONE CALL" PRIOR TO COMMENCING ANY GRADING, EXCAVATION OR UNDERGROUND
- 3. THE CONTRACTOR SHALL PRESERVE AND MAINTAIN ANY EXISTING STREET LIGHTS
- CLEAR AND GRUB AND REMOVE ALL TREES, VEGETATION AND SITE DEBRIS PRIOR TO GRADING. ALL REMOVED MATERIAL SHALL BE HAULED FROM THE SIDE DAILY. ALL CLEARING AND GRUBBING AND REMOVALS SHALL BE PERFORMED PER THE CONTRACT SPECIFICATIONS. EROSION CONTROL MEASURES SHALL BE IMMEDIATELY ESTABLISHED UPON REMOVAL.

AND TRAFFIC SIGNS PER THE REQUIREMENTS OF THE CITY

- THE CONTRACTOR SHALL BE REQUIRED TO OBTAIN ALL PERMITS FROM THE CITY AS REQUIRED FOR ALL WORK WITH THE STREET AND PUBLIC RIGHT OF WAY
- 6. ALL CURB TERMINI TO HAVE A 3 FOOT TAPER UNLESS OTHERWISE NOTED.
- ALL CURB DIMENSIONS SHOWN ARE TO THE FACE OF CURB UNLESS OTHERWISE
- BITUMINOUS IMPREGNATED FIBER BOARD TO BE PLACED AT FULL DEPTH OF CONCRETE ADJACENT TO EXISTING STRUCTURES AND BEHIND CURB ADJACENT TO DRIVEWAYS AND SIDEWALKS.
- ACCESSIBLE PARKING SIGNAGE AND PAVEMENT MARKINGS SHALL BE PLACED IN ACCORDANCE WITH ADA AND MMUTCD.
- CLOSURE OF SIDEWALK ALONG 24TH AVENUE MUST BE COORDINATED WITH SIDEWALK CLOSURES OF OTHER AREA CONSTRUCTION PROJECTS ALONG 24TH AVENUE CITY OF BLOOMINGTON PROJECT #2013-201 WAYFINDING, EXTENDED STAY HOTEL CONSTRUCTION (NE QUADRANT OF LINDAU & 24TH0 & CITY OF BLOOMINGTON PROJECT #2014-302 LINDAU EXTENSION. CONTACT TOM BOWLIN 952-563-4914 TO COORDINATE.
- PRIVATE SIDEWALKS ADJACENT TO PARKING STALLS SHALL BE A MINIMUM OF 6" IN

PARKING **E**

SURFACE: REGULAR STALLS - 90 HC STALLS

TOTAL RAMP PARKING REGULAR STALLS - 311

HC STALLS - 8 TOTAL - 319 MOTORCYCLE PARKING



BLOOMINGTON,

TERRATRO

SITE PLAN LEGEND ■

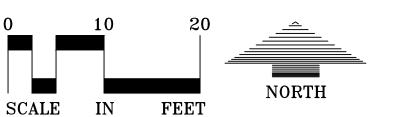
BITUMINOUS PAVEMENT

CONCRETE PAVEMENT

SETBACKS■

MINIMUM REQUIRED SETBACK = 10' OR WIDTH OF ADJACENT EASEMENT MAXIMUM SETBACK = 20'

TOP NUT HYDRANT LOCATED IN THE NORTHWEST QUADRANT OF 26TH AVE. S. & 82ND ST.



EXISTING CONDITIONS PROVIDED BY SUNDE LAND SURVEYING DATED FEBRUARY 15th, 2015. CONTRACTOR TO FIELD VERIFY SITE CONDITIONS AND CONTACT ENGINEER ABOUT ANY DISCREPANCIES.

CITY OF BLOOMINGTON STANDARD NOTES

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CONTRACTOR SHALL OBTAIN A PUBLIC WORKS PERMIT APPLICATION FOR OBSTRUCTIONS AND CONCRETE WORK WITHIN LINDAU LANE RIGHT-OF-WAY. PERMIT IS REQUIRED PRIOR TO REMOVALS OR INSTALLATION. CONTACT SEAN JENKINS AT 952-563-4545 OR SJENKINS@CI.BLOOMINGTON.MN.US PERMIT APPLICATION AND FOR FEE INFORMATION.

PUBLIC WORKS PERMIT APPLICATION FOR UNDERGROUND WORK WITHIN THE RIGHT-OF-WAY IS REQUIRED PRIOR TO REMOVAL OR INSTALLATION OF SANITARY, WATER OR STORM WORK WITHIN THE LINDAU LANE PUBLIC RIGHT-OF-WAY. CONTACT UTILITIES AT 952-563-4568 FOR PERMIT APPLICATION AND FOR FEE INFORMATION.

RESTORE CITY STREET BY COMPLYING WITH THE CITY STREET IMPROVEMENT POLICY; CONTACT UTILITIES (952-563-4568) FOR THE REQUIREMENTS AND SHOW THIS ON THE PLAN.

CONTRACTOR SHALL OBTAIN HENNEPIN COUNTY PERMIT FOR WORK WITHIN 24TH AVENUE RIGHT-OF-WAY. CONTACT HENNEPIN COUNTY PERMIT ENGINEER AT 612-596-0336 FOR PERMIT APPLICATION AND FEE INFORMATION.

ALL PARKING STALLS TO BE PAINTED WITH WHITE STRIPING.

- ALL CONSTRUCTION AND POST-CONSTRUCTION PARKING SHALL BE ON-SITE NO ON-STREET PARKING/LOADING/UNLOADING
- 8. ALL PUBLIC SIDEWALKS SHALL NOT BE OBSTRUCTED.
- STORAGE OF MATERIALS OR EQUIPMENT SHALL NOT BE ALLOWED ON PUBLIC STREETS OR WITHIN PUBLIC RIGHT-OF-WAY.

10. STREET LIGHTING AND INTERCONNECT CONDUIT MUST BE EXPOSED FOR CITY INSPECTION PRIOR TO POURING CONCRETE OR BACKFILLING EXCAVATIONS IN CITY RIGHT-OF-WAY. CONTACT SEAN IENKINS (952-563-4545) TO SCHEDULE INSPECTION.

11. INSTALL CROSSWALK PAVEMENT MARKINGS IN ACCORDANCE WITH MMUTCD.

12. A MN LICENSED CIVIL ENGINEER MUST DESIGN AND SIGN ALL RETAINING WALLS 4-FOOT HIGH AND HIGHER.

13. ALL COMPONENTS OF THE WATER SYSTEM, UP TO THE WATER METER OR FIRE SERVICE EQUIPMENT, (I.E. MAINLINE PIPES, SERVICES LARGER THAN 2", VALVES, FITTINGS, CAPS, ETC.) SHALL UTILIZE PROTECTIVE INTERNAL COATINGS MEETING CURRENT ANSI/AWWA STANDARDS FOR CEMENT MORTAR LINING OR SPECIAL COATINGS. THE USE OF UNLINED OR UNCOATED (CAST-IRON, GRAY-IRON, STEEL, GALVANIZED, ETC.) PIPE SHALL NOT BE ALLOWED.

14. COMBINATION FIRE AND DOMESTIC SERVICES MUST TERMINATE WITH A THREAD ON FLANGE OR AN MJ TO FLANGE ADAPTER.

15. UTILITY AND MECHANICAL CONTRACTORS SHALL COORDINATE INSTALLATION OF WATER SERVICE PIPES, FITTINGS, AND VALVES ALL THE WAY INTO THE BUILDING (I.E. UP TO METERS AND/OR FIRE SERVICE EQUIPMENT) TO ACCOMMODATE CITY INSPECTION AND TESTING.

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Gopher State One Call TWIN CITY AREA: 651-454-0002 TOLL FREE: 1-800-252-1166

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CONCRETE SIDEWALK

CONSTRUCTION LIMITS

BENCHMARK I

ELEVATION=809.17 FEET (NGVD 1929)

7200 Hemlock Lane, Suite 300 Maple Grove, MN 55369 763.424.5505 www.loucksinc.com

LANDSCAPE ARCHITECTURE

CIVIL ENGINEERING

LAND SURVEYING

ENVIRONMENTAL

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DRC SUBMITTAL

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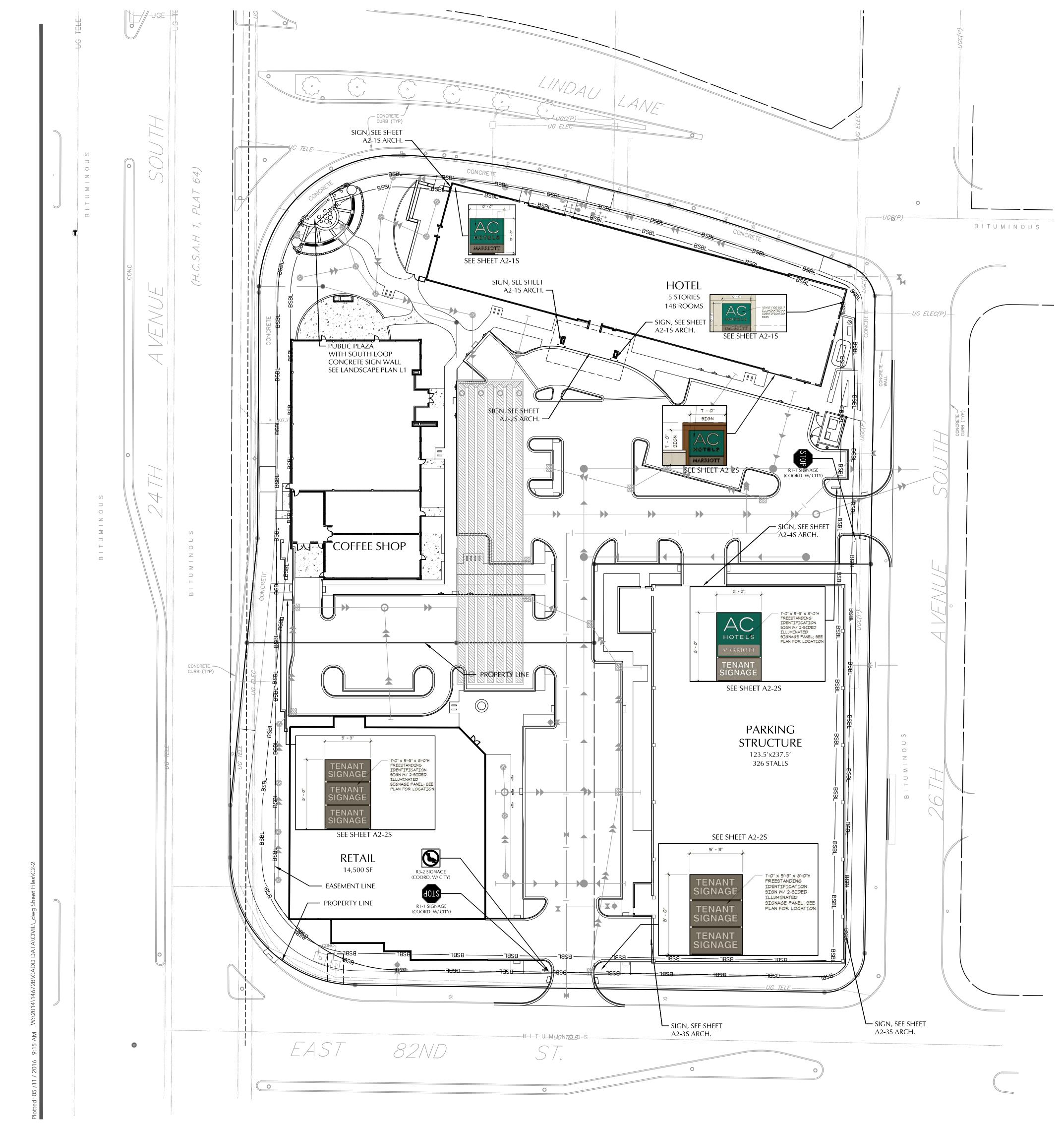
QUALITY CONTROL 14672B Loucks Project No Project Lead

TDG Checked By Review Date 05-11-16 SHEET INDEX

SITE PLAN C2-2 OVERALL SIGNAGE PLAN C3-1 GRADING & DRAINAGE PLAN C4-1 UTILITY PLAN (SANI. & WATER) UTILITY PLAN (STORM) **DETAIL SHEET**

DETAIL SHEET

SITE PLAN



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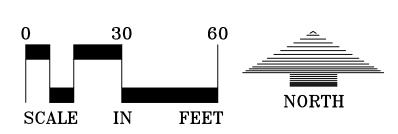
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BENCHMARK

TOP NUT HYDRANT LOCATED IN THE NORTHWEST QUADRANT OF 26TH AVE. S. & 82ND ST. ELEVATION=809.17 FEET (NGVD 1929)

ALPHA **RESTAURANT**

BLOOMINGTON,

TERRATRO

CIVIL ENGINEERING LAND SURVEYING LANDSCAPE ARCHITECTURE ENVIRONMENTAL

7200 Hemlock Lane, Suite 300 Maple Grove, MN 55369 763.424.5505 www.loucksinc.com

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05-11-16 QUALITY CONTROL

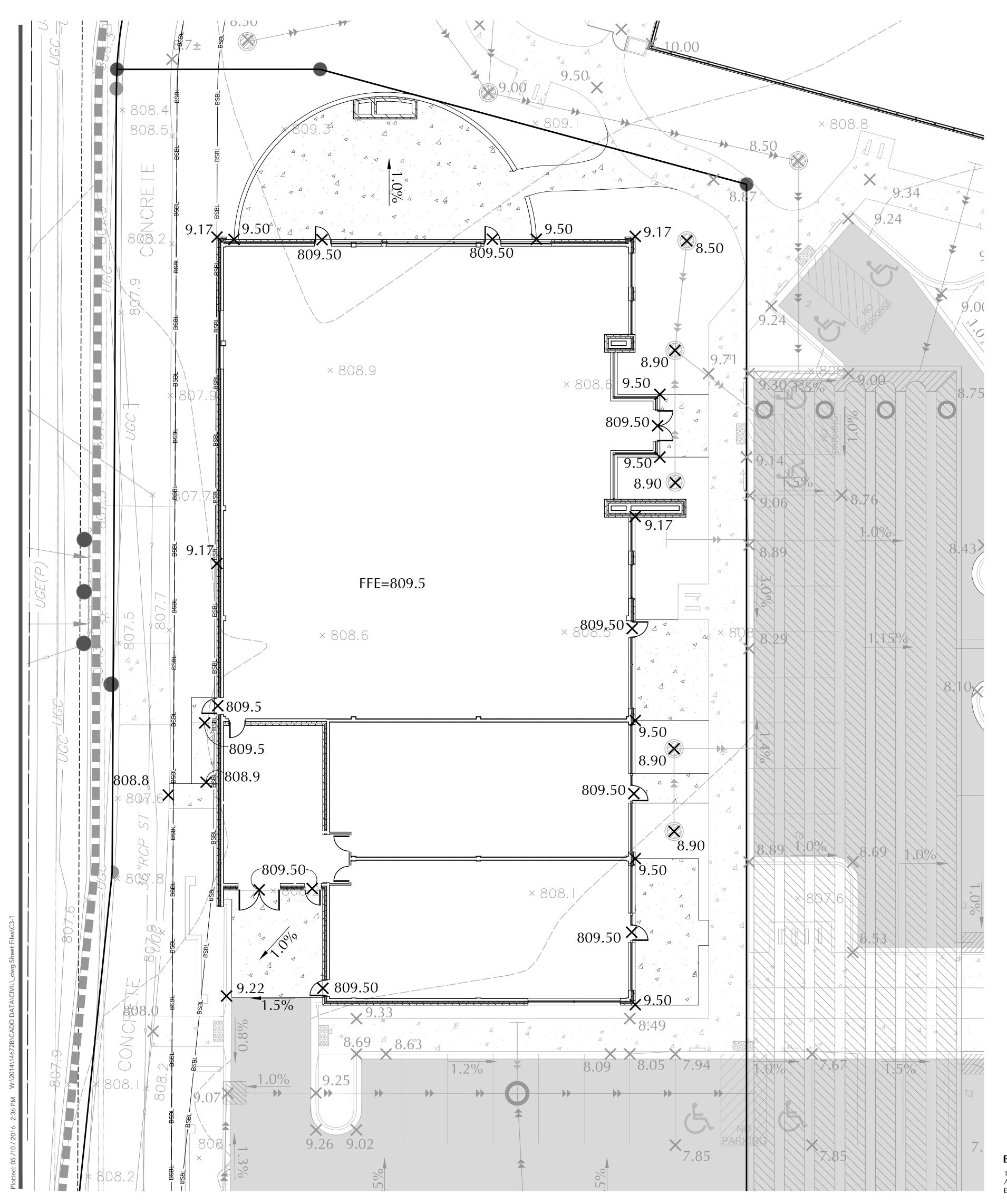
14672B Loucks Project No Project Lead NMM TRG TDG Checked By **Review Date**

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C2-1 SITE PLAN C2-2 OVERALL SIGNAGE PLAN C3-1 GRADING & DRAINAGE PLAN C3-2 SWPP PLAN C4-1 UTILITY PLAN (SANI. & WATER) UTILITY PLAN (STORM) C8-1 DETAIL SHEET

DETAIL SHEET

OVERALL SITE SIGNAGE PLAN



GRADING, DRAINAGE & EROSION CONTROL NOTES

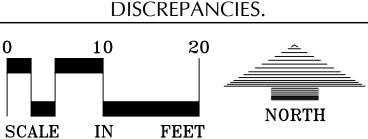
- 1. THE CONTRACTOR SHALL REFER TO THE ARCHITECTURAL PLANS FOR EXACT LOCATIONS AND DIMENSIONS OF BUILDINGS, VESTIBULES, SLOPED PAVING, EXIT PORCHES, RAMPS, TRUCK DOCKS, ENTRY LOCATIONS AND LOCATIONS OF DOWNSPOUTS.
- 2. ALL DISTURBED UNPAVED AREAS ARE TO RECEIVE MINIMUM OF 4 INCHES OF TOP SOIL AND SEED/MULCH. THESE AREAS SHALL BE WATERED/MAINTAINED BY THE CONTRACTOR UNTIL VEGETATION IS ESTABLISHED.
- 3. THE CONTRACTOR SHALL TAKE ALL PRECAUTIONS NECESSARY TO AVOID PROPERTY DAMAGE TO ADJACENT PROPERTIES DURING THE CONSTRUCTION PHASE OF THIS PROJECT. THE CONTRACTOR WILL BE HELD RESPONSIBLE FOR ANY DAMAGES TO ADJACENT PROPERTIES OCCURRING DURING THE CONSTRUCTION PHASE OF THIS PROJECT.
- 4. THE CONTRACTOR WILL BE RESPONSIBLE FOR PROVIDING AND MAINTAINING TRAFFIC CONTROL DEVICES SUCH AS BARRICADES, WARNING SIGNS, DIRECTIONAL SIGNS, FLAGMEN AND LIGHTS TO CONTROL THE MOVEMENT OF TRAFFIC WHERE NECESSARY. PLACEMENT OF THESE DEVICES SHALL BE APPROVED BY THE ENGINEER PRIOR TO PLACEMENT. TRAFFIC CONTROL DEVICES SHALL CONFORM TO THE APPROPRIATE MINNESOTA DEPARTMENT OF TRANSPORTATION STANDARDS.
- 5. IN ACCORDANCE WITH GENERALLY ACCEPTED CONSTRUCTION PRACTICES, THE CONTRACTOR WILL BE SOLELY AND COMPLETELY RESPONSIBLE FOR CONDITIONS ON THE JOB SITE, INCLUDING SAFETY OF ALL PERSONS AND PROPERTY DURING THE PERFORMANCE OF THE WORK. THIS REQUIREMENT WILL APPLY CONTINUOUSLY AND NOT BE LIMITED TO NORMAL WORKING HOURS.
- 6. THE DUTY OF THE ENGINEER OR THE DEVELOPER TO CONDUCT CONSTRUCTION REVIEW OF THE CONTRACTORS PERFORMANCE IS NOT INTENDED TO INCLUDE REVIEW OF THE ADEQUACY OF THE CONTRACTORS SAFETY MEASURES IN, OR NEAR THE CONSTRUCTION SITE.
- 7. BEFORE BEGINNING CONSTRUCTION THE CONTRACTOR SHALL INSTALL A TEMPORARY ROCK ENTRANCE PAD AT ALL POINTS OF VEHICLE EXIT FROM THE PROJECT SITE. SAID ROCK ENTRANCE PAD SHALL BE MAINTAINED BY THE CONTRACTOR FOR THE DURATION OF THE PROJECT. SEE DETAILS SHOWN ON DETAIL SHEET(S.
- 8. EROSION AND SEDIMENTATION CONTROL MEASURES SHALL BE ESTABLISHED AROUND THE ENTIRE SITE PERIMETER AND IN ACCORDANCE WITH NPDES PERMIT REQUIREMENTS, BEST MANAGEMENT PRACTICES, CITY REQUIREMENTS AND THE DETAILS SHOWN ON THE DETAIL SHEET(S).

- 9. ALL ENTRANCES AND CONNECTIONS TO CITY STREETS SHALL BE CONSTRUCTED PER THE REQUIREMENTS OF THE CITY AND/OR COUNTY. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL PERMITS AND NOTIFICATIONS AS REQUIRED.
- 10. ALL STREET REPAIRS AND PATCHING SHALL BE PERFORMED PER THE REQUIREMENTS OF THE CITY. ALL TRAFFIC CONTROL SHALL BE PROVIDED BY THE CONTRACTOR AND SHALL BE ESTABLISHED PER THE REQUIREMENTS OF THE MINNESOTA MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES (MUTCD) AND THE CITY. THIS SHALL INCLUDE ALL SIGNAGE, BARRICADES, FLASHERS AND FLAGGERS AS NEEDED. ALL PUBLIC STREETS SHALL BE OPEN TO TRAFFIC AT ALL TIMES.
- 11. ADJUST ALL EXISTING STRUCTURES, BOTH PUBLIC AND PRIVATE TO THE PROPOSED GRADES WHERE DISTURBED AND COMPLY WITH ALL REQUIREMENTS OF THE UTILITY OWNERS. STRUCTURES BEING RESET TO PAVED AREAS MUST MEET OWNERS REQUIREMENTS FOR TRAFFIC
- 12. STREETS MUST BE CLEANED AND SWEPT WHENEVER TRACKING OF SEDIMENTS OCCURS AND BEFORE SITES ARE LEFT IDLE FOR WEEKENDS AND HOLIDAYS. A REGULAR SWEEPING SCHEDULE MUST BE ESTABLISHED.
- 13. DUST MUST BE ADEQUATELY CONTROLLED.
- 14. SEE SWPPP FOR ADDITIONAL EROSION CONTROL NOTES AND REQUIREMENTS.
- 15. SEE UTILITY PLAN FOR STORM SEWER INFORMATION.
- 16. SPOT ELEVATIONS REPRESENT FINISHED SURFACE GRADES AT GUTTER LINE, FACE OF BUILDING, OR EDGE OF PAVEMENT UNLESS OTHERWISE NOTED
- 17. REFER TO THE GEOTECHNICAL EVALUATION REPORT, DATED APRIL 20, 2015 AS PREPARED BY BRAUN INTERTEC CORPORATION, FOR AN EXISTING SUBSURFACE SITE CONDITION ANALYSIS AND CONSTRUCTION RECOMMENDATIONS.
- 18. SEE UTILITY PLAN FOR STORM, WATER AND SANITARY SEWER INFORMATION.
- 19. SEE SITE PLAN FOR CURB AND BITUMINOUS TAPER LOCATIONS
- 20. PER ADA STANDARDS, SIDEWALK CROSS SLOPES SHALL NOT EXCEED 2% AND RUNNING SLOPES SHALL NOT EXCEED 5% ALONG THE ACCESSIBLE ROUTES.

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ALPHA E RESTAURANT

BLOOMINGTON,

TERRATRON

340 MAIN SUITE #200

LOUCKS

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5-11-16 DRC SUBMITTAL

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PROFESSIONAL SIGNATURE

I hereby certify that this plan, specification or report was prepared by me or under my direct supervision and that

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o. 45861 05-11-16

Loucks Project No. 14672B
Project Lead NMM
Drawn By TRG

Project Lead NMM
Drawn By TRG
Checked By TDG
Review Date 05-11-16

SHEET INDEX

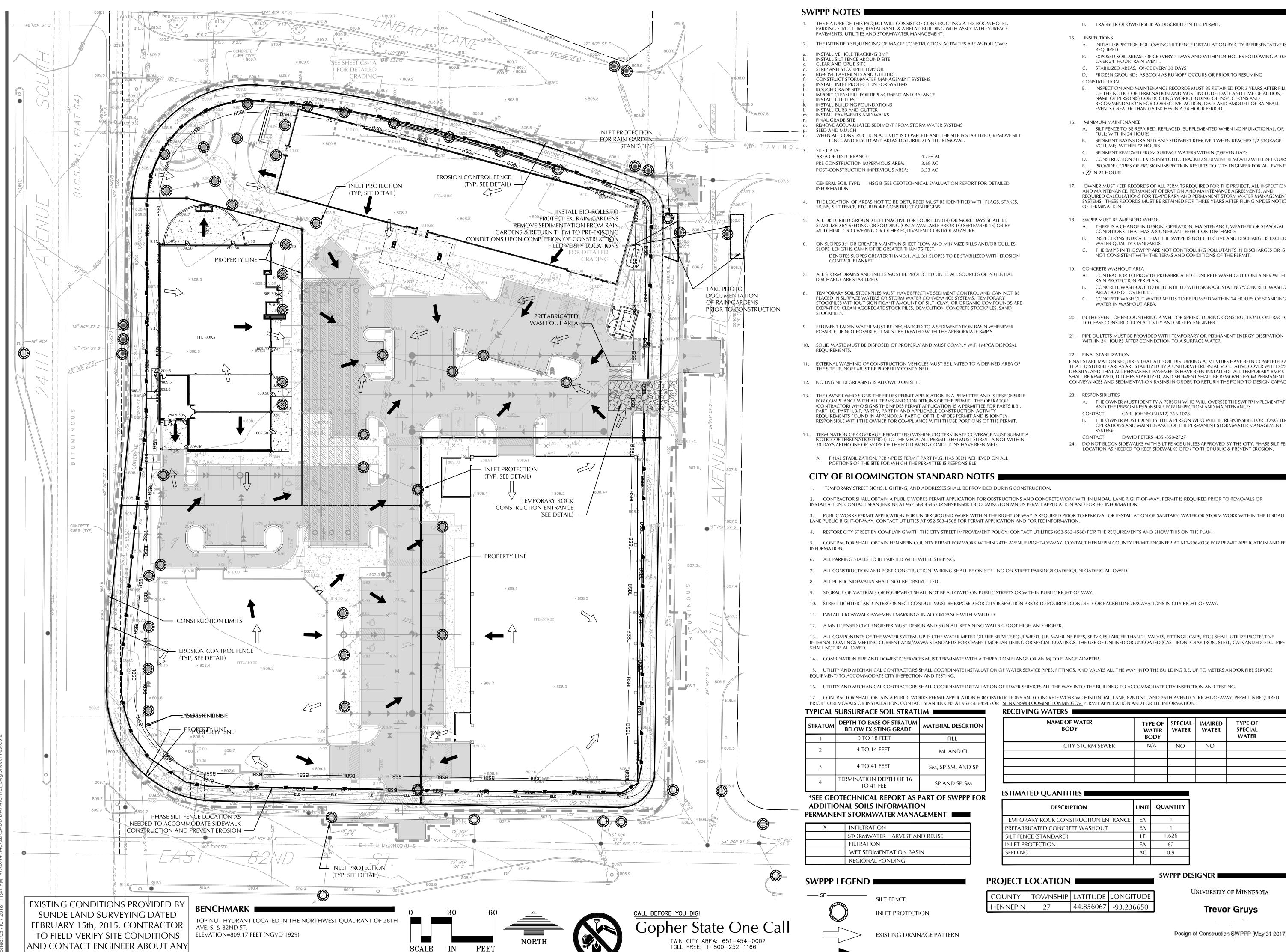
SITE PLAN
OVERALL SIGNAGE PLAN
GRADING & DRAINAGE PLAN
SWPP PLAN
UTILITY PLAN (SANI. & WATER)

C3-2 SWPP PLAN
C4-1 UTILITY PLAN (SANI. & WATER)
C4-2 UTILITY PLAN (STORM)
C8-1 DETAIL SHEET
C8-2 DETAIL SHEET

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GRADING & DRAINAGE PLAN

C3-1



DISCREPANCIES.

SWPPP NOTES ■

- THE NATURE OF THIS PROJECT WILL CONSIST OF CONSTRUCTING: A 148 ROOM HOTEL PARKING STRUCTURE, RESTAURANT, & A RETAIL BUILDING WITH ASSOCIATED SURFACE PAVEMENTS, UTILITIES AND STORMWATER MANAGEMENT.
- 2. THE INTENDED SEQUENCING OF MAJOR CONSTRUCTION ACTIVITIES ARE AS FOLLOWS:
- INSTALL VEHICLE TRACKING BMP
- INSTALL SILT FENCE AROUND SITE CLEAR AND GRUB SITE
- STRIP AND STOCKPILE TOPSOIL REMOVE PAVEMENTS AND UTILITIES
- CONSTRUCT STORMWATER MANAGEMENT SYSTEMS INSTALL INLET PROTECTION FOR SYSTEMS
- ROUGH GRADE SITE
- IMPORT CLEAN FILL FOR REPLACEMENT AND BALANCE INSTALL UTILITIES
- INSTALL BUILDING FOUNDATIONS INSTALL CURB AND GUTTER
- INSTALL PAVEMENTS AND WALKS FINAL GRADE SITE
- REMOVE ACCUMULATED SEDIMENT FROM STORM WATER SYSTEMS SEED AND MULCH
- WHEN ALL CONSTRUCTION ACTIVITY IS COMPLETE AND THE SITE IS STABILIZED, REMOVE SILT FENCE AND RESEED ANY AREAS DISTURBED BY THE REMOVAL
- SITE DATA AREA OF DISTURBANCE:
- 4.72± AC PRE-CONSTRUCTION IMPERVIOUS AREA: 3.68 AC POST-CONSTRUCTION IMPERVIOUS AREA: 3.53 AC
- GENERAL SOIL TYPE: HSG B (SEE GEOTECHNICAL EVALUATION REPORT FOR DETAILED INFORMATION)
- THE LOCATION OF AREAS NOT TO BE DISTURBED MUST BE IDENTIFIED WITH FLAGS, STAKES, SIGNS, SILT FENCE, ETC. BEFORE CONSTRUCTION BEGINS.
- ALL DISTURBED GROUND LEFT INACTIVE FOR FOURTEEN (14) OR MORE DAYS SHALL BE STABILIZED BY SEEDING OR SODDING (ONLY AVAILABLE PRIOR TO SEPTEMBER 15) OR BY MULCHING OR COVERING OR OTHER EQUIVALENT CONTROL MEASURE.
- ON SLOPES 3:1 OR GREATER MAINTAIN SHEET FLOW AND MINIMIZE RILLS AND/OR GULLIES, SLOPE LENGTHS CAN NOT BE GREATER THAN 75 FEET. DENOTES SLOPES GREATER THAN 3:1. ALL 3:1 SLOPES TO BE STABILIZED WITH EROSION CONTROL BLANKET
- 7. ALL STORM DRAINS AND INLETS MUST BE PROTECTED UNTIL ALL SOURCES OF POTENTIAL DISCHARGE ARE STABILIZED
- TEMPORARY SOIL STOCKPILES MUST HAVE FEFECTIVE SEDIMENT CONTROL AND CAN NOT BE PLACED IN SURFACE WATERS OR STORM WATER CONVEYANCE SYSTEMS. TEMPORARY STOCKPILES WITHOUT SIGNIFICANT AMOUNT OF SILT, CLAY, OR ORGANIC COMPOUNDS ARE EXEPMT EX: CLEAN AGGREGATE STOCK PILES, DEMOLITION CONCRETE STOCKPILES, SAND
- SEDIMENT LADEN WATER MUST BE DISCHARGED TO A SEDIMENTATION BASIN WHENEVER POSSIBLE. IF NOT POSSIBLE, IT MUST BE TREATED WITH THE APPROPRIATE BMP'S.
- 10. SOLID WASTE MUST BE DISPOSED OF PROPERLY AND MUST COMPLY WITH MPCA DISPOSAL
- 11. EXTERNAL WASHING OF CONSTRUCTION VEHICLES MUST BE LIMITED TO A DEFINED AREA OF THE SITE. RUNOFF MUST BE PROPERLY CONTAINED.
- 12. NO ENGINE DEGREASING IS ALLOWED ON SITE.

DEPTH TO BASE OF STRATUM

BELOW EXISTING GRADE

0 TO 18 FEET

4 TO 14 FEET

4 TO 41 FEET

ERMINATION DEPTH OF 16

STORMWATER HARVEST AND REUSE

INLET PROTECTION

PROPOSED DRAINAGE PATTERN

WET SEDIMENTATION BASIN

REGIONAL PONDING

TO 41 FEET

INFILTRATION

FILTRATION

- 13. THE OWNER WHO SIGNS THE NPDES PERMIT APPLICATION IS A PERMITTEE AND IS RESPONSIBLE FOR COMPLIANCE WITH ALL TERMS AND CONDITIONS OF THE PERMIT. THE OPERATOR (CONTRACTOR) WHO SIGNS THE NPDES PERMIT APPLICATION IS A PERMITTEE FOR PARTS ILB. PART II.C. PART II.B-F. PART V. PART IV AND APPLICABLE CONSTRUCTION ACTIVITY REQUIREMENTS FOUND IN APPENDIX A. PART C. OF THE NPDES PERMIT AND IS IOINTLY RESPONSIBLE WITH THE OWNER FOR COMPLIANCE WITH THOSE PORTIONS OF THE PERMIT
- TERMINATION OF COVERAGE -PERMITTEE(S) WISHING TO TERMINATE COVERAGE MUST SUBMIT A OTICE OF TERMINATION (NOT) TO THE MPCA. ALL PERMITTEE(S) MUST SUBMIT A NOT WITHIN 30 DAYS AFTER ONE OR MORE OF THE FOLLOWING CONDITIONS HAVE BEEN MET:
- A. FINAL STABILIZATION, PER NPDES PERMIT PART IV.G. HAS BEEN ACHIEVED ON ALL PORTIONS OF THE SITE FOR WHICH THE PERMITTEE IS RESPONSIBLE

B. TRANSFER OF OWNERSHIP AS DESCRIBED IN THE PERMIT

15. INSPECTIONS

- INITIAL INSPECTION FOLLOWING SILT FENCE INSTALLATION BY CITY REPRESENTATIVE IS
- EXPOSED SOIL AREAS: ONCE EVERY 7 DAYS AND WITHIN 24 HOURS FOLLOWING A 0.5" OVER 24 HOUR RAIN EVENT
- C. STABILIZED AREAS: ONCE EVERY 30 DAYS D. FROZEN GROUND: AS SOON AS RUNOFF OCCURS OR PRIOR TO RESUMING
- CONSTRUCTION.
- INSPECTION AND MAINTENANCE RECORDS MUST BE RETAINED FOR 3 YEARS AFTER FILING OF THE NOTICE OF TERMINATION AND MUST INCLUDE: DATE AND TIME OF ACTION, NAME OF PERSON(S) CONDUCTING WORK, FINDING OF INSPECTIONS AND RECOMMENDATIONS FOR CORRECTIVE ACTION, DATE AND AMOUNT OF RAINFALL EVENTS GREATER THAN 0.5 INCHES IN A 24 HOUR PERIOD.

16. MINIMUM MAINTENANCE

- A. SILT FENCE TO BE REPAIRED, REPLACED, SUPPLEMENTED WHEN NONFUNCTIONAL, OR 1/3
- B. SEDIMENT BASINS DRAINED AND SEDIMENT REMOVED WHEN REACHES 1/2 STORAGE VOLUME; WITHIN 72 HOURS
- SEDIMENT REMOVED FROM SURFACE WATERS WITHIN (7)SEVEN DAYS
- CONSTRUCTION SITE EXITS INSPECTED, TRACKED SEDIMENT REMOVED WITH 24 HOURS. PROVIDE COPIES OF EROSION INSPECTION RESULTS TO CITY ENGINEER FOR ALL EVENTS > 1/2" IN 24 HOURS
- 17. OWNER MUST KEEP RECORDS OF ALL PERMITS REQUIRED FOR THE PROJECT, ALL INSPECTIONS AND MAINTENANCE, PERMANENT OPERATION AND MAINTENANCE AGREEMENTS, AND REQUIRED CALCULATIONS FOR TEMPORARY AND PERMANENT STORM WATER MANAGEMENT SYSTEMS. THESE RECORDS MUST BE RETAINED FOR THREE YEARS AFTER FILING NPDES NOTICE

18. SWPPP MUST BE AMENDED WHEN:

- THERE IS A CHANGE IN DESIGN, OPERATION, MAINTENANCE, WEATHER OR SEASONAL CONDITIONS THAT HAS A SIGNIFICANT EFFECT ON DISCHARGE
- INSPECTIONS INDICATE THAT THE SWPPP IS NOT EFFECTIVE AND DISCHARGE IS EXCEEDING WATER QUALITY STANDARDS. THE BMP'S IN THE SWPPP ARE NOT CONTROLLING POLLUTANTS IN DISCHARGES OR IS
- NOT CONSISTENT WITH THE TERMS AND CONDITIONS OF THE PERMIT.
- 19. CONCRETE WASHOUT AREA

WITHIN 24 HOURS AFTER CONNECTION TO A SURFACE WATER.

WATER IN WASHOUT AREA.

- CONTRACTOR TO PROVIDE PREFABRICATED CONCRETE WASH-OUT CONTAINER WITH RAIN PROTECTION PER PLAN.
- B. CONCRETE WASH-OUT TO BE IDENTIFIED WITH SIGNAGE STATING "CONCRETE WASHOUT AREA DO NOT OVERFILL" CONCRETE WASHOUT WATER NEEDS TO BE PUMPED WITHIN 24 HOURS OF STANDING
- 20. IN THE EVENT OF ENCOUNTERING A WELL OR SPRING DURING CONSTRUCTION CONTRACTOR
- TO CEASE CONSTRUCTION ACTIVITY AND NOTIFY ENGINEER.
- 21. PIPE OULTETS MUST BE PROVIDED WITH TEMPORARY OR PERMANENT ENERGY DISSIPATION

22. FINAL STABILIZATION

FINAL STABILIZATION REQUIRES THAT ALL SOIL DISTURBING ACVTIVITIES HAVE BEEN COMPLETED AND THAT DISTURBED AREAS ARE STABILIZED BY A UNIFORM PERENNIAL VEGETATIVE COVER WITH 70% DENSITY, AND THAT ALL PERMANENT PAVEMENTS HAVE BEEN INSTALLED. ALL TEMPORARY BMP'S SHALL BE REMOVED. DITCHES STABILIZED. AND SEDIMENT SHALL BE REMOVED FROM PERMANENT

CONVEYANCES AND SEDIMENTATION BASINS IN ORDER TO RETURN THE POND TO DESIGN CAPACITY.

- 23. RESPONSIBILITIES
- THE OWNER MUST IDENTIFY A PERSON WHO WILL OVERSEE THE SWPPP IMPLEMENTATION AND THE PERSON RESPONSIBLE FOR INSPECTION AND MAINTENANCE: CARL JOHNSON (612)-366-1078
- THE OWNER MUST IDENTIFY THE A PERSON WHO WILL BE RESPONSIBLE FOR LONG TERM OPERATIONS AND MAINTENANCE OF THE PERMANENT STORMWATER MANAGEMENT CONTACT: DAVID PETERS (435)-658-2727
- 24. DO NOT BLOCK SIDEWALKS WITH SILT FENCE UNLESS APPROVED BY THE CITY. PHASE SILT FENCE LOCATION AS NEEDED TO KEEP SIDEWALKS OPEN TO THE PUBLIC & PREVENT EROSION.

TYPE OF | SPECIAL | IMAIRED |

WATER | WATER | WATER

N/A NO

BODY

UNIT QUANTITY

1,626

0.9

EA

LF

EA AC **SPECIAL**

WATER

CADD QUALIFICATION instruments of the Consultant professional services for use solely

ALPHA

TERRATRO

CIVIL ENGINEERING

LANDSCAPE ARCHITECTURE

7200 Hemlock Lane, Suite 300

Maple Grove, MN 55369

LAND SURVEYING

ENVIRONMENTAL

www.loucksinc.com

763.424.5505

RESTAURAN

with respect to this project. These CADD files shall not be used on other projects, for additions to this project, or for completion Consultant. With the Consultant's approval, others may be information and reference only. All intentional or unintentional revisions, additions, or deletions to these CADD files shall be made at the full risk of that party making such revisions, additions eletions and that party shall hold harmless and indemnify the

SUBMITTAL/REVISIONS

DRC SUBMITTAL

PROFESSIONAL SIGNATURE I hereby certify that this plan, specification or report was

orepared by me or under my direct supervision and that

05-11-16 QUALITY CONTROL

14672B Loucks Project No NMM Project Lead TRG Drawn By

Checked By eview Date

TDG 05-11-16 SHEET INDEX

SITE PLAN OVERALL SIGNAGE PLAN **GRADING & DRAINAGE PLAN**

4-1 UTILITY PLAN (SANI. & WATER) UTILITY PLAN (STORM) **DETAIL SHEET DETAIL SHEET**

STORM WATER

POLLUTION PREVENTION

PROJECT LOCATION ■

COUNTY | TOWNSHIP | LATITUDE | LONGITUDE 27 44.856067 -93.236650

RECEIVING WATERS

ESTIMATED QUANTITIES ■

SILT FENCE (STANDARD)

INLET PROTECTION

SEEDING

NAME OF WATER

BODY

DESCRIPTION

PREFABRICATED CONCRETE WASHOUT

EMPORARY ROCK CONSTRUCTION ENTRANCE | EA |

CITY STORM SEWER

EXISTING DRAINAGE PATTERN

MATERIAL DESCRTION

ML AND CL

SM, SP-SM, AND SP

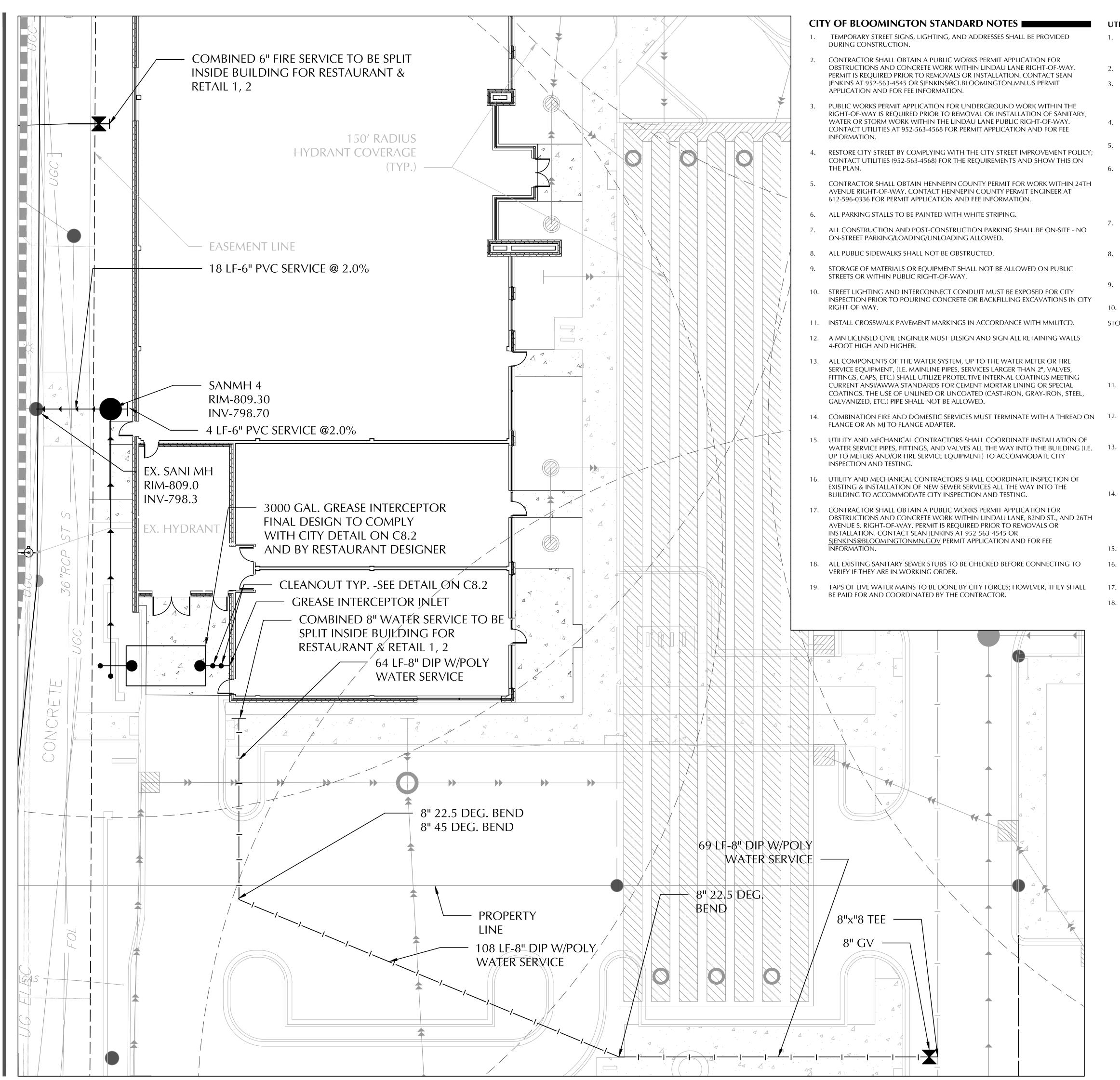
SP AND SP-SM

If your certification expires on May 31, 2015, you must take a class in Winter 2014-2015 to maintain certification.

University of Minnesota

Trevor Gruys

Design of Construction SWPPP (May 31 2017)



UTILITY PLAN NOTES

- 1. ALL SANITARY SEWER, STORM SEWER AND WATERMAIN UTILITIES SHALL BE FURNISHED AND INSTALLED PER THE REQUIREMENTS OF THE SPECIFICATIONS, THE CITY AND THE STANDARD UTILITIES SPECIFICATION OF THE CITY ENGINEERS ASSOCIATION OF MINNESOTA (CEAM), 1999 EDITION.
- 2. SEE DETAIL SHEET AND THE CONTRACT SPECIFICATIONS FOR SPECIFIC UTILITY DETAILS.
- 3. ALL CONNECTIONS TO EXISTING UTILITIES SHALL BE PERFORMED PER THE REQUIREMENTS OF THE CITY. THE CITY DEPARTMENT OF ENGINEERING AND BUILDING INSPECTIONS DEPARTMENT AND THE CONSTRUCTION ENGINEER MUST BE NOTIFIED AT LEAST 48 HOURS PRIOR TO ANY WORK WITHIN THE PUBLIC RIGHT OF WAY, OR WORK IMPACTING PUBLIC UTILITIES.
- THE CONTRACTOR SHALL NOTIFY GOPHER STATE ONE CALL AT 651-454-0002 AT LEAST 48 HOURS PRIOR TO PERFORMING ANY EXCAVATION OR UNDERGROUND WORK.
- THE CONTRACTOR SHALL FIELD ADJUST WATERMAIN TO AVOID CONFLICTS WITH SANITARY SEWER, STORM SEWER, AND SERVICES AS REQUIRED.
- ALL STREET REPAIRS AND PATCHING SHALL BE PERFORMED PER THE REQUIREMENTS OF THE CITY. ALL TRAFFIC CONTROL SHALL BE PROVIDED BY THE CONTRACTOR AND SHALL BE ESTABLISHED PER THE REQUIREMENTS OF THE MINNESOTA MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES (MMUTCD) AND THE CITY. THIS SHALL INCLUDE ALL SIGNAGE, BARRICADES, FLASHERS AND FLAGGERS AS NEEDED. ALL PUBLIC STREETS SHALL BE OPEN TO TRAFFIC AT ALL TIMES. NO ROAD CLOSURES SHALL BE PERMITTED WITHOUT THE EXPRESSED AUTHORITY OF OF THE CITY.
- 7. ALL UTILITY PIPE BEDDING SHALL BE COMPACTED SAND OR FINE GRANULAR MATERIAL PER THE REQUIREMENTS OF THE CITY. ALL COMPACTION SHALL BE PERFORMED PER THE REQUIREMENTS OF THE CEAM SPECIFICATION.
- ADJUST ALL EXISTING STRUCTURES, BOTH PUBLIC AND PRIVATE TO THE PROPOSED GRADES WHERE DISTURBED AND COMPLY WITH ALL REQUIREMENTS OF THE UTILITY OWNERS. STRUCTURES BEING RESET TO PAVED AREAS MUST MEET OWNERS REQUIREMENTS FOR TRAFFIC LOADING.
- 9. ALL NEW WATERMAIN AND SERVICES MUST HAVE A MINIMUM OF 8.0 FEET AND A MAXIMUM OF 10 FEET

10. PROPOSED PIPE MATERIALS:

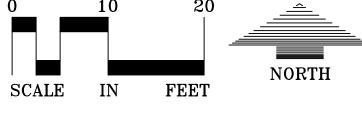
SANITARY SEWER

STORM SEWER PERFORATED ALUMINZED CSP, OR HDPE-INFILTRATION SYSTEM ONLY 48" DIAMETER STORM SEWER DUAL WALL HDPE 12" TO 24" DIAMETER STORM SEWER 24" DIAMETER STORM SEWER SCHEDULE 40 PVC 8" DIAMETER CLASS 52 DIP W/8 MIL. MIN. POLYWRAP WATERMAIN 6" TO 8" DIAMETER SANITARY SEWER SCHEDULE 40 PVC SDR 26 8" DIAMETER

11. ALL PORTIONS OF THE STORM SEWER SYSTEM, INCLUDING CATCH BASINS, LOCATED WITHIN 10 FEET OF THE BUILDING OR WATER SERVICE LINE MUST BE TESTED ACCORDANCE WITH MINNESOTA RULES, PART

- ALL JOINTS AND CONNECTIONS IN THE STORM SEWER SYSTEM SHALL BE GASTIGHT OR WATERTIGHT (SEE MINNESOTA RULES, PART 4715.0700). APPROVED RESILIENT RUBBER JOINTS MUST BE USED TO MAKE WATERTIGHT CONNECTIONS TO MANHOLES, CATCHBASINS, AND OTHER STRUCTURES.
- HDPE PIPE CONNECTIONS INTO ALL CONCRETE STRUCTURES SHALL BE MADE WITH WATER TIGHT MATERIALS, UTILIZING AN A-LOK OR WATERSTOP GASKET OR BOOT, CAST-IN-PLACE RUBBER BOOT, OR APPROVED EQUAL. WHERE THE ALIGNMENT PRECLUDES THE USE OF THE ABOVE APPROVED WATERTIGHT METHODS, CONSEAL 231 WATERSTOP SEALANT, OR APPROVED EQUAL WILL ONLY BE ALLOWED AS APPROVED BY THE ENGINEER.
- 14. HIGH-DENSITY POLYETHYLENE (HDPE) STORM DRAINS MUST COMPLY WITH MINNESOTA RULES, PART
 - PIPES 4-INCH TO 10-INCH IN SIZE MUST COMPLY WITH AASHTO M252.
 - PIPES 12-INCH TO 60-INCH IN SIZE MUST COMPLY WITH ASTM F2306.
 - ALL FITTINGS MUST COMPLY WITH ASTM D3212. WATER-TIGHT JOINTS MUST BE USED AT ALL CONNECTIONS INCLUDING STRUCTURES.
- 15. INTERIOR CHIMNEY SEALS SHALL BE INSTALLED ON ALL SANITARY SEWER MANHOLES (SEE DETAIL)
- 16. CONTRACTOR SHALL CONTACT UTILITIES DIVISION (952-563-8777) REGARDING PERMIT FOR STORM
- SEWER CONSTRUCTION.
- 17. ALL WET-TAP CONNECTIONS TO BE DONE BY THE CITY
- 18. 10 FEET OF HORIZONTAL & 18" OF VERTICAL SEPARATION TO MAINTAINED AT ALL TIMES BETWEEN SANITARY SEWER & WATERMAIN WHERE PIPES ARE RUNNING PARALLEL.

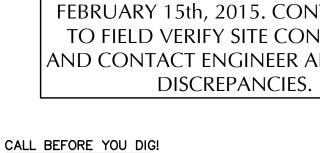
4" TO 8" DIAMETER



BENCHMARK I

TOP NUT HYDRANT LOCATED IN THE NORTHWEST QUADRANT OF 26TH AVE. S. & 82ND ST. ELEVATION=809.17 FEET (NGVD 1929)

> **EXISTING CONDITIONS PROVIDED BY** SUNDE LAND SURVEYING DATED FEBRUARY 15th, 2015. CONTRACTOR TO FIELD VERIFY SITE CONDITIONS AND CONTACT ENGINEER ABOUT ANY





Gopher State One Call TWIN CITY AREA: 651-454-0002 TOLL FREE: 1-800-252-1166

WARNING:

THE CONTRACTOR SHALL BE RESPONSIBLE FOR CALLING FOR LOCATIONS OF ALL EXISTING UTILITIES. THEY SHALL COOPERATE WITH ALL UTILITY COMPANIES IN MAINTAINING THEIR SERVICE AND / OR RELOCATION OF LINES.

THE CONTRACTOR SHALL CONTACT GOPHER STATE ONE CALL AT 651-454-0002 AT LEAST 48 HOURS IN ADVANCE FOR THE LOCATIONS OF ALL UNDERGROUND WIRES, CABLES, CONDUITS, PIPES, MANHOLES, VALVES OR OTHER BURIED STRUCTURES BEFORE DIGGING. THE CONTRACTOR SHALL REPAIR OR REPLACE THE ABOVE WHEN DAMAGED DURING CONSTRUCTION AT NO COST TO THE OWNER.

ALPHA RESTAURANT

BLOOMINGTON,

TERRATRO

CIVIL ENGINEERING LAND SURVEYING LANDSCAPE ARCHITECTURE ENVIRONMENTAL

7200 Hemlock Lane, Suite 300 Maple Grove, MN 55369 763.424.5505 www.loucksinc.com

CADD QUALIFICATION

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> SUBMITTAL/REVISIONS DRC SUBMITTAL

PROFESSIONAL SIGNATURE

I hereby certify that this plan, specification or report was orepared by me or under my direct supervision and that

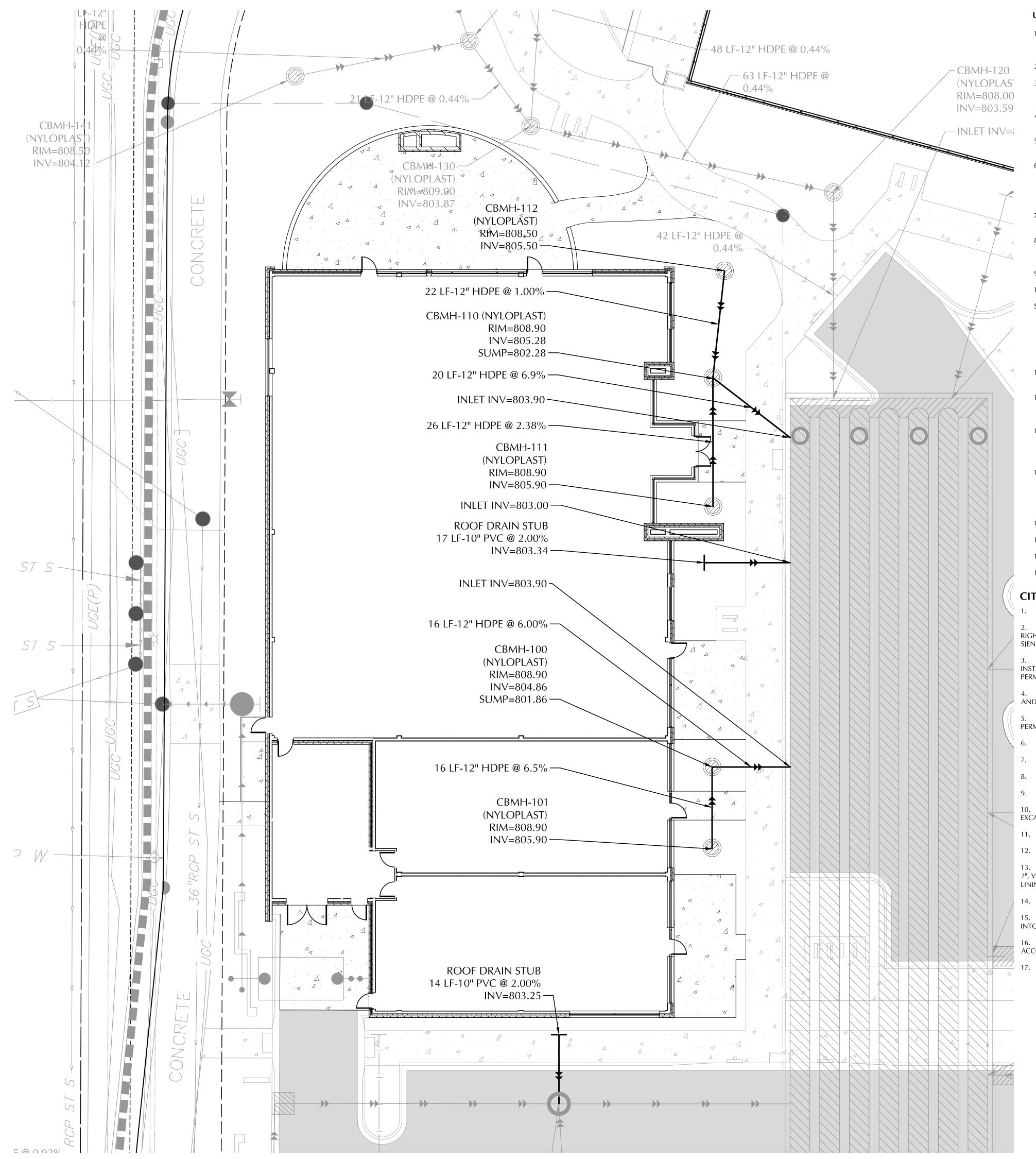
QUALITY CONTROL

14672B Loucks Project No Project Lead NMM TRG TDG Checked By 05-11-16 Review Date

SHEET INDEX SITE PLAN C2-2 OVERALL SIGNAGE PLAN GRADING & DRAINAGE PLAN C4-1 UTILITY PLAN (SANI. & WATER)

C3-1 UTILITY PLAN (STORM) C8-1 **DETAIL SHEET** C8-2 **DETAIL SHEET**

UTILITY PLAN **SANITARY SEWER & WATERMAIN**



UTILITY PLAN NOTES

ALL SANITARY SEWER, STORM SEWER AND WATERMAIN UTILITIES SHALL BE FURNISHED AND INSTALLED PER THE REQUIREMENTS OF THE SPECIFICATIONS, THE CITY AND THE STANDARD UTILITIES SPECIFICATION OF THE CITY ENGINEERS ASSOCIATION OF MINNESOTA (CEAM),

- SEE DETAIL SHEET AND THE CONTRACT SPECIFICATIONS FOR SPECIFIC UTILITY DETAILS.
- ALL CONNECTIONS TO EXISTING UTILITIES SHALL BE PERFORMED PER THE REQUIREMENTS OF THE CITY. THE CITY DEPARTMENT OF ENGINEERING AND BUILDING INSPECTIONS DEPARTMENT AND THE CONSTRUCTION ENGINEER MUST BE NOTIFIED AT LEAST 48 HOURS PRIOR TO ANY WORK WITHIN THE PUBLIC RIGHT OF WAY, OR WORK IMPACTING PUBLIC UTILITIES
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- ALL UTILITY PIPE BEDDING SHALL BE COMPACTED SAND OR FINE GRANULAR MATERIAL PER THE REQUIREMENTS OF THE CITY. ALL COMPACTION SHALL BE PERFORMED PER THE REQUIREMENTS OF THE CEAM SPECIFICATION.
- ADJUST ALL EXISTING STRUCTURES, BOTH PUBLIC AND PRIVATE TO THE PROPOSED GRADES WHERE DISTURBED AND COMPLY WITH ALL REQUIREMENTS OF THE UTILITY OWNERS. STRUCTURES BEING RESET TO PAVED AREAS MUST MEET OWNERS REQUIREMENTS FOR TRAFFIC
- ALL NEW WATERMAIN AND SERVICES MUST HAVE A MINIMUM OF 8.0 FEET AND A MAXIMUM OF 10 FEET OF COVER.
- 10. PROPOSED PIPE MATERIALS:

STORM SEWER PERFORATED ALUMINZED CSP, OR HDPE-INFILTRATION SYSTEM ONLY 48" DIAMETER

STORM SEWER	DUAL WALL HDPE	12" TO 24" DIAMETER
STORM SEWER	RCP	24" DIAMETER
STORM SEWER	SCHEDULE 40 PVC	8" DIAMETER
WATERMAIN	CLASS 52 DIP W/8 MIL. MIN. POLYWRAP	6" TO 8" DIAMETER
Sanitary sewer	SCHEDULE 40 PVC SDR 26	8" DIAMETER
Sanitary sewer	DIP	8" DIAMETER

- ALL PORTIONS OF THE STORM SEWER SYSTEM, INCLUDING CATCH BASINS, LOCATED WITHIN 10 FEET OF THE BUILDING OR WATER SERVICE LINE MUST BE TESTED ACCORDANCE WITH MINNESOTA RULES, PART 4715.2820
- ALL JOINTS AND CONNECTIONS IN THE STORM SEWER SYSTEM SHALL BE GASTIGHT OR WATERTIGHT (SEE MINNESOTA RULES, PART 4715.0700). APPROVED RESILIENT RUBBER JOINTS MUST BE USED TO MAKE WATERTIGHT CONNECTIONS TO MANHOLES, CATCHBASINS, AND OTHER STRUCTURES.
- HDPE PIPE CONNECTIONS INTO ALL CONCRETE STRUCTURES SHALL BE MADE WITH WATER TIGHT MATERIALS, UTILIZING AN A-LOK OR WATERSTOP GASKET OR BOOT, CAST-IN-PLACE RUBBER BOOT, OR APPROVED EQUAL. WHERE THE ALIGNMENT PRECLUDES THE USE OF THE ABOVE APPROVED WATERTIGHT METHODS, CONSEAL 231 WATERSTOP SEALANT, OR APPROVED EQUAL WILL ONLY BE ALLOWED AS APPROVED BY THE ENGINEER.
- HIGH-DENSITY POLYETHYLENE (HDPE) STORM DRAINS MUST COMPLY WITH MINNESOTA RULES, PART 4715.0540:
- PIPES 4-INCH TO 10-INCH IN SIZE MUST COMPLY WITH AASHTO M252.
- PIPES 12-INCH TO 60-INCH IN SIZE MUST COMPLY WITH ASTM F2306. ALL FITTINGS MUST COMPLY WITH ASTM D3212.
- WATER-TIGHT JOINTS MUST BE USED AT ALL CONNECTIONS INCLUDING STRUCTURES
- 15. INTERIOR CHIMNEY SEALS SHALL BE INSTALLED ON ALL SANITARY SEWER MANHOLES (SEE DETAIL)
- 16. CONTRACTOR SHALL CONTACT UTILITIES DIVISION (952-563-8777) REGARDING PERMIT FOR STORM SEWER CONSTRUCTION.
- 17. ALL WET-TAP CONNECTIONS TO BE DONE BY THE CITY.
- 18. 10 FEET OF HORIZONTAL & 18" OF VERTICAL SEPARATION TO MAINTAINED AT ALL TIMES BETWEEN SANITARY SEWER & WATERMAIN WHERE PIPES ARE RUNNING PARALLEL.

CITY OF BLOOMINGTON STANDARD NOTES

- TEMPORARY STREET SIGNS, LIGHTING, AND ADDRESSES SHALL BE PROVIDED DURING CONSTRUCTION.
- CONTRACTOR SHALL OBTAIN A PUBLIC WORKS PERMIT APPLICATION FOR OBSTRUCTIONS AND CONCRETE WORK WITHIN LINDAU LANE RIGHT-OF-WAY, PERMIT IS REQUIRED PRIOR TO REMOVALS OR INSTALLATION, CONTACT SEAN JENKINS AT 952-563-4545 OR SJENKINS@CI.BLOOMINGTON.MN.US PERMIT APPLICATION AND FOR FEE INFORMATION.
- 3. PUBLIC WORKS PERMIT APPLICATION FOR UNDERGROUND WORK WITHIN THE RIGHT-OF-WAY IS REQUIRED PRIOR TO REMOVAL OR INSTALLATION OF SANITARY, WATER OR STORM WORK WITHIN THE LINDAU LANE PUBLIC RIGHT-OF-WAY. CONTACT UTILITIES AT 952-563-4568 FOR PERMIT APPLICATION AND FOR FEE INFORMATION.
- 4. RESTORE CITY STREET BY COMPLYING WITH THE CITY STREET IMPROVEMENT POLICY; CONTACT UTILITIES (952-563-4568) FOR THE REQUIREMENTS
- 5. CONTRACTOR SHALL OBTAIN HENNEPIN COUNTY PERMIT FOR WORK WITHIN 24TH AVENUE RIGHT-OF-WAY. CONTACT HENNEPIN COUNTY PERMIT ENGINEER AT 612-596-0336 FOR PERMIT APPLICATION AND FEE INFORMATION.
- 6. ALL PARKING STALLS TO BE PAINTED WITH WHITE STRIPING.
- 7. ALL CONSTRUCTION AND POST-CONSTRUCTION PARKING SHALL BE ON-SITE NO ON-STREET PARKING/LOADING/UNLOADING ALLOWED
- 8. ALL PUBLIC SIDEWALKS SHALL NOT BE OBSTRUCTED.
- 9. STORAGE OF MATERIALS OR EQUIPMENT SHALL NOT BE ALLOWED ON PUBLIC STREETS OR WITHIN PUBLIC RIGHT-OF-WAY.
- 10. STREET LIGHTING AND INTERCONNECT CONDUIT MUST BE EXPOSED FOR CITY INSPECTION PRIOR TO POURING CONCRETE OR BACKFILLING EXCAVATIONS IN CITY RIGHT-OF-WAY.
- 11. INSTALL CROSSWALK PAVEMENT MARKINGS IN ACCORDANCE WITH MMUTCD.
- 12. A MN LICENSED CIVIL ENGINEER MUST DESIGN AND SIGN ALL RETAINING WALLS 4-FOOT HIGH AND HIGHER.
- 13. ALL COMPONENTS OF THE WATER SYSTEM, UP TO THE WATER METER OR FIRE SERVICE EQUIPMENT, (I.E. MAINLINE PIPES, SERVICES LARGER THAN 2", VALVES, FITTINGS, CAPS, ETC.) SHALL UTILIZE PROTECTIVE INTERNAL COATINGS MEETING CURRENT ANSI/AWWA STANDARDS FOR CEMENT MORTAR LINING OR SPECIAL COATINGS. THE USE OF UNLINED OR UNCOATED (CAST-IRON, GRAY-IRON, STEEL, GALVANIZED, ETC.) PIPE SHALL NOT BE ALLOWED. C2-1
- 14. COMBINATION FIRE AND DOMESTIC SERVICES MUST TERMINATE WITH A THREAD ON FLANGE OR AN MJ TO FLANGE ADAPTER.
- 15. UTILITY AND MECHANICAL CONTRACTORS SHALL COORDINATE INSTALLATION OF WATER SERVICE PIPES, FITTINGS, AND VALVES ALL THE WAY INTO THE BUILDING (I.E. UP TO METERS AND/OR FIRE SERVICE EQUIPMENT) TO ACCOMMODATE CITY INSPECTION AND TESTING.
- 16. UTILITY AND MECHANICAL CONTRACTORS SHALL COORDINATE INSTALLATION OF SEWER SERVICES ALL THE WAY INTO THE BUILDING TO ACCOMMODATE CITY INSPECTION AND TESTING.
- 17. TAPS OF LIVE WATER MAINS TO BE DONE BY CITY FORCES; HOWEVER, THEY SHALL BE PAID FOR AND COORDINATED BY THE CONTRACTOR.

FEET IN

TOP NUT HYDRANT LOCATED IN THE NORTHWEST QUADRANT OF 26TH AVE. S. & 82ND ST. WARNING: ELEVATION=809.17 FEET (NGVD 1929)

BENCHMARK ____

THE CONTRACTOR SHALL BE RESPONSIBLE FOR CALLING FOR LOCATIONS OF ALL EXISTING UTILITIES. THEY SHALL COOPERATE WITH ALL UTILITY COMPANIES IN MAINTAINING THEIR SERVICE AND / OR RELOCATION OF LINES.

THE CONTRACTOR SHALL CONTACT GOPHER STATE ONE CALL AT 651-454-0002 AT LEAST 48 HOURS IN ADVANCE FOR THE LOCATIONS OF ALL UNDERGROUND WIRES, CABLES, CONDUITS, PIPES, MANHOLES, VALVES OR OTHER BURIED STRUCTURES BEFORE DIGGING. THE CONTRACTOR SHALL REPAIR OR REPLACE THE ABOVE WHEN DAMAGED DURING CONSTRUCTION AT NO COST TO THE OWNER.

ALPHA **RESTAURANT**

BLOOMINGTON,

TERRATRO

CIVIL ENGINEERING LAND SURVEYING LANDSCAPE ARCHITECTURE ENVIRONMENTAL

7200 Hemlock Lane, Suite 300 Maple Grove, MN 55369 763.424.5505 www.loucksinc.com

CADD QUALIFICATION

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SUBMITTAL/REVISIONS

DRC SUBMITTAL

PROFESSIONAL SIGNATURE I hereby certify that this plan, specification or report was orepared by me or under my direct supervision and that

QUALITY CONTROL 14672B Loucks Project No Project Lead

TDG Checked By 05-11-16

SHEET INDEX SITE PLAN C2-2 OVERALL SIGNAGE PLAN C3-1 GRADING & DRAINAGE PLAN C4-1 UTILITY PLAN (SANI. & WATER) UTILITY PLAN (STORM)

C8-1 **DETAIL SHEET DETAIL SHEET**

UTILITY PLAN STORM SEWER

TERRATRO

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Consultant from any & all responsibilities, claims, and liabilities. SUBMITTAL/REVISIONS

DRC SUBMITTAL 05-11-16

I hereby certify that this plan, specification or report was prepared by me or under my direct supervision and that laws of the \$tate of Minnesota

> 05-11-16 QUALITY CONTROL

Loucks Project No Project Lead Drawn By TDG Checked By 05-11-16 Review Date

> SHEET INDEX SITE PLAN OVERALL SIGNAGE PLAN

C3-1 GRADING & DRAINAGE PLAN C3-2 SWPP PLAN C4-1 UTILITY PLAN (SANI. & WATER) UTILITY PLAN (STORM) C8-1 DETAIL SHEET

DETAIL SHEET

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PROFESSIONAL SIGNATURE

NMM TRG

C2-2

DETAIL SHEET

ADJUSTING RINGS
- SHALL BE PRECAST, - SHALL BE PRECASI,
2" (SIMM) THICK, AND
REINFORCED WITH 8 GAUGE
STEEL WRE.
- SET EACH RING IN A FULL
BED OF MORTAR.
- TOTAL ADJUSTMENT HEIGHT
SHALL BE BETWEEN
4" (JORMY) AND 12" (JORMY) 4" (102mm) AND 12" (305mm). 8" (203 mm) OPENINGS AS NEEDED CAST-IN-PLACE CONCRETE BASE PLACED ON 6" (152mm) SAND OR FOUNDATION MATERIAL. STANDARD CATCH BASIN

 PIPE SIZE
 BEARING AREA

 6"
 2.25 SF

 8"
 4 SF

2. THRUST BLOCKS ARE REQUIRED REGARDLESS OF ANY OTHER RESTRAINT METHODS USED ON WATERMAIN LESS THAN 12" IN DIA.

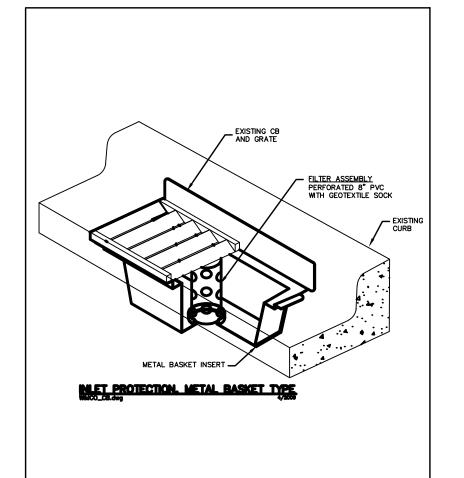
3. RESTRAINT METHODS ON WATERMAIN LARGER THAN 12" SHALL BE MEGALUGS, LOCKING GASKETS OR OTHER APPROVED EQUAL. THE LENGTH OF RESTRAINT SHALL BE AS COMPUTED BY DIPRA.

TYPICAL THRUST BLOCK

(343mm)

→ 26"(660mm) **→**

B618 STANDARD CURB & GUTTER
B618_C&G.dwg 4/2009



AS APPROVED BY CITY FORCES HIGH BREAK-AWAY SECTION

TYPICAL HYDRANT INSTALLATION

SITE-17

REBARS SHALL BE INSTALLED ON EACH SIDE OF THE CASTING. REBARS AND EDGY COATING PER MN/DOT

2 NO. 4 REBARS ON EACH SIDE

STRM-5

CATCH BASIN CASTING

INSTALLATION DETAIL

POURED CONC.THRUST

BEARING SURFACE AREA

BLOCKS 2.25 SQ.FT.

- 2 LAYERS OF 8 MIL

1.5" DIA COMPACTED ROCK

(LIMESTONE IS NOT APPROVED)

POLYETHYLENE

4' MIN-10' MAX

MIN 4'OR

AS SHOWN ON PLAN

VALVE BOX -

6" R.S. GATE VALVE —

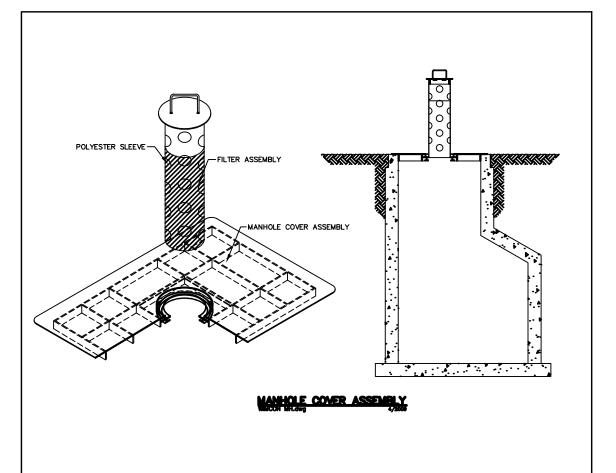
USE FOR CURB REPLACEMENT IN R.O.W.

INTEGRAL CURB

AND WALK

PRECAST CONC. BASE

18"x18"x4" THICK -



WATEROUS PACER CLASSIC.

NOZZLES/CONNECTIONS AS FOLLOWS:

NUT AND NO ROCKER LUG.

NATIONAL STANDARD THREADS) AND

STANDARD NOZZLE CAPS WITH 1.5 INCH

PENTAGON NUTS, AND NO ROCKER LUGS.

• USE SS NUTS AND BOLTS AS APPROVED BY

• ALL VALVES TO OPEN COUNTER-CLOCKWISE.

• SEE TYPICAL VALVE INSTALLATION DETAIL FOR

WATEROUS PACER CLASSIC HYDRANTS SHALL INCLUDE INSTALLATION OF THE MANUFACTURED MASS CURRENT

AND CLASSIC HYDROLOGY

AND CLASSIC HYDR

ANTI-CHATTER BRASS UPPER VALVE WASHER.

o TWO - 2.5 INCH HOSE

BARREL TO BE BRIGHT RED.

SITE-10

THE ENGINEER.

VALVE DETAILS.

NOZZLES/CONNECTIONS (WITH

ONE – FACTORY INSTALLED 5 INCH

STORZ PUMPER NOZZLE/CONNECTOR,

INCLUDING A MANUFACTURER SUPPLIED AND INSTALLED ANODIZED ALUMINUM

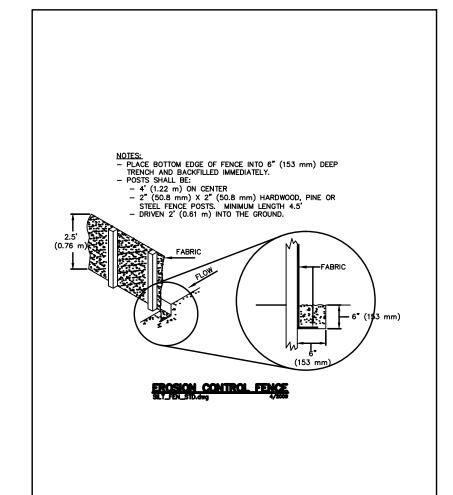
NOZZLE CAP WITH A 1.5 INCH PENTAGON

ALL EXPOSED WATERMAIN SHALL BE WRAPPED WITH POLYETHYLENE IN ACCORDANCE WITH

OR APPROVED EQUAL

EQUIP WITH THREE HOSE

MUELLER SUPERCENTURION 250 MODEL



KEY NOTES:

| MM/DOT S.P.4010 2" ADJUSTING RINGS AS NEEDED
| 4" MIN. TO 12" MAX.] SET EACH RING IN FULL BED OF MORTAR.
| MM/DOT S.P.4010 STD. SHORT CONE SECTION.

4 USE ONLY PRECAST SECTIONS. NO BRICK OR BLOCK

5 8" CAST IN-PLACE CONCRETE OR 6" PRECAST REINFORCED CONCRETE (64" MINIMUM OD)

7 LEAN CONCRETE TO BEAR AGAINST FIRM UNDISTURBED SOIL

10 FOR CONNECTION TO EXISTING MH'S, CORE DRILL OPENING AND PROVIDE TYPE B WATER TIGHT CONNECTOR

1. IF A SEWER MAIN IS CONNECTED MORE THAN 24"
ABOVE THE INVERT OF THE OUTGOING SEWER,
CONNECTION SHALL BE BY MEANS OF AN OUTSIDE
DROP. SEE DETAIL THIS SHEET.

3. LIFTING HOLES WHICH PENETRATE THROUGH SECTION WALLS ARE NOT PERMITTED.

STD. SANITARY SEVER MH

(3/4" PER FT. TYP.) TIP GUTTER OUT AS REQ'D -

THICKNESS OF SECTION

B6 STYLE CONCRETE

CURB AND GUTTER

2. FORM GROUT TO SLOPE TO CENTER TROUGH.

4. STEPS ARE NOT PERMITTED IN MANHOLES.

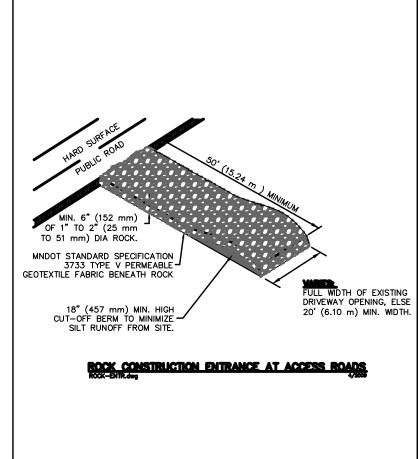
3>12" TOP SECTION REQUIRED.

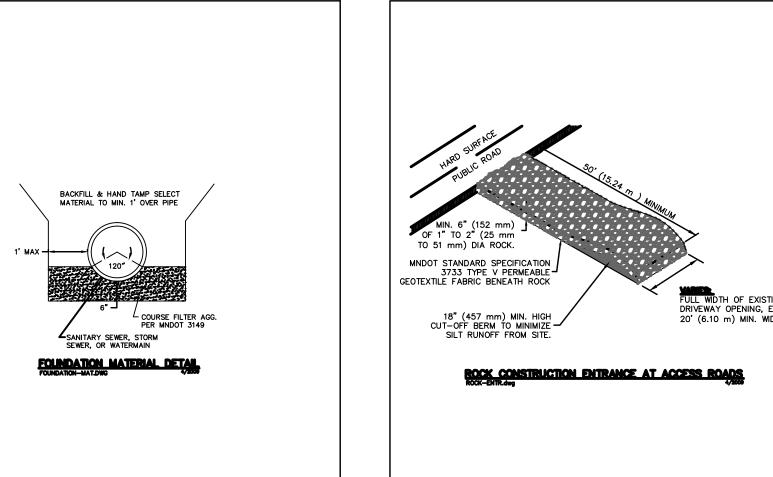
6 CEMENT MORTAR ALL AROUND

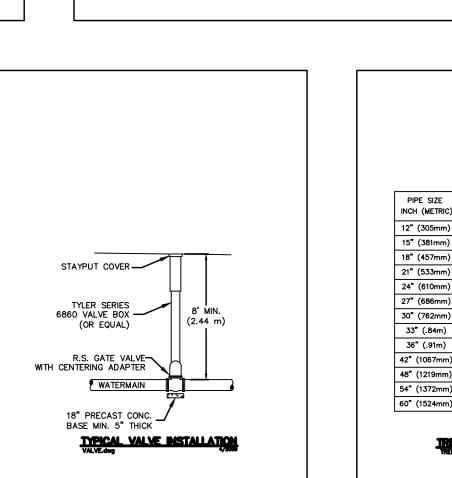
PROVIDE WATER TIGHT PIPE CONNECTIONS SEE DETAIL THIS SHEET

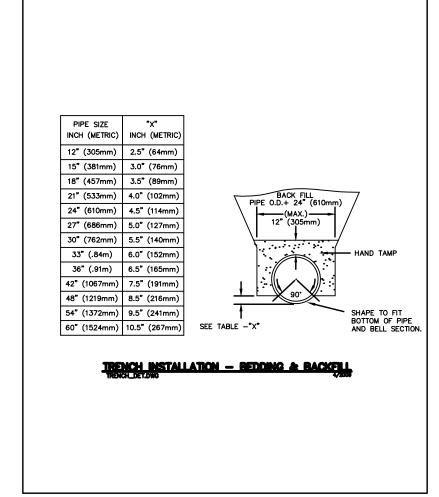
11 6" SAND OR FOUNDATION MATERIAL

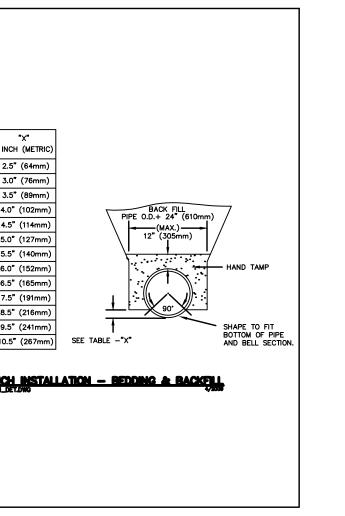
12 UNDISTURBED SOIL OR COMPACTED SUBGRADE

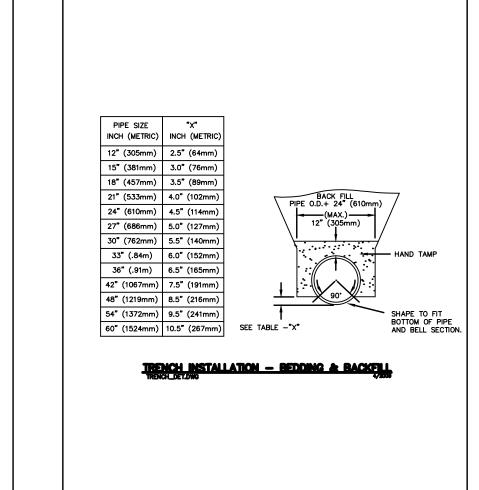


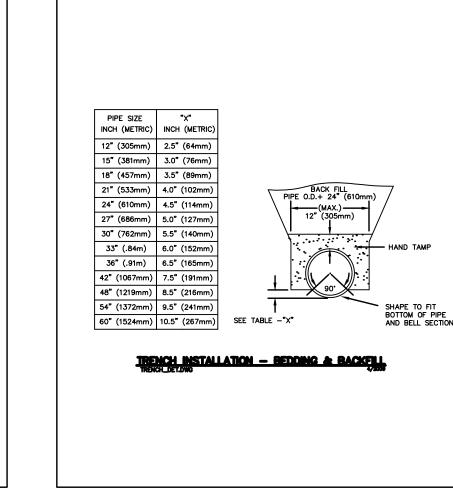








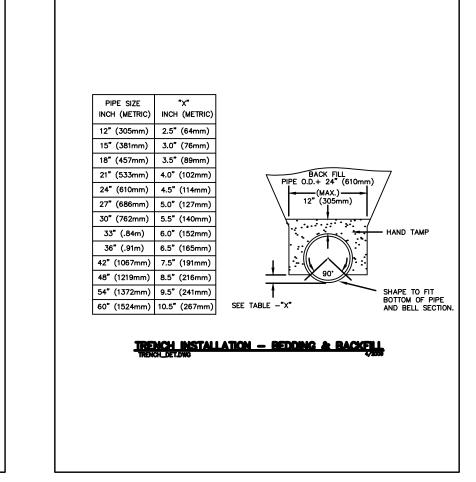


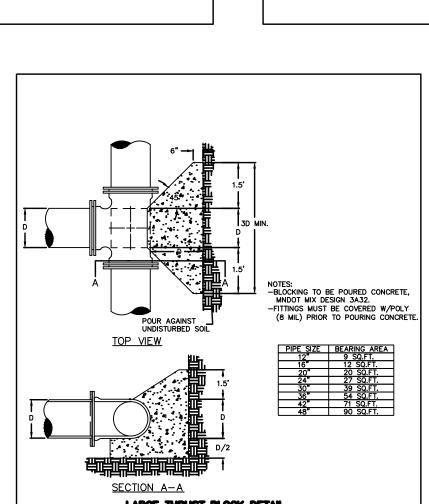


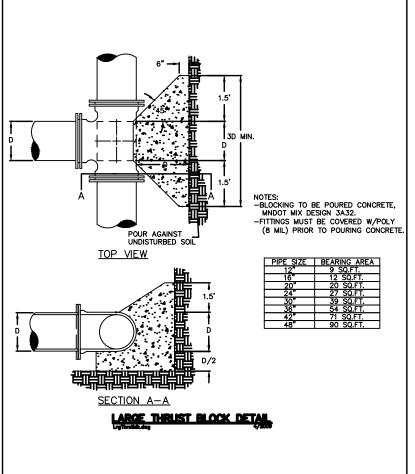
MN/DOT S.P.4010 2"
ADJUSTING RINGS AS
NEEDED (4" MIN. TO
12" MAX.). SET EACH
RING IN A FULL BED
OF MORTAR.

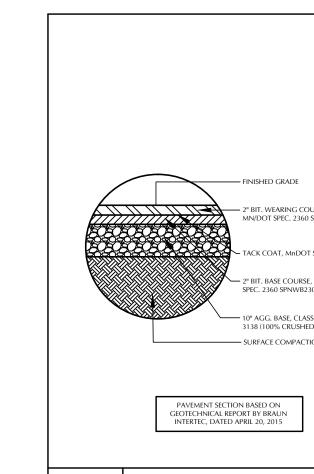
12" TOP SECTION REQUIRED

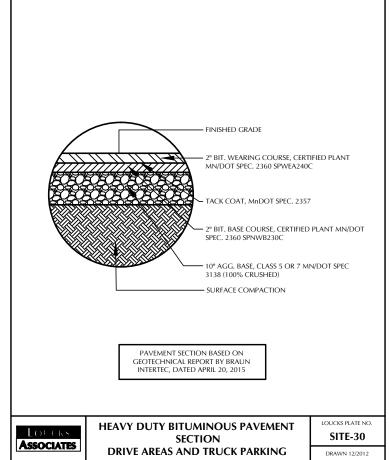
-MN/DOT S.P.4011
PRE-CAST BASE PLACED
ON 6" SAND OR
FOUNDATION MATERIAL.

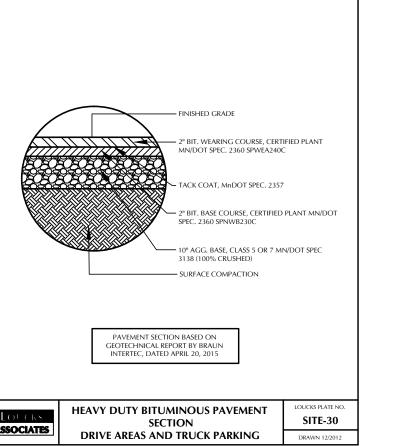


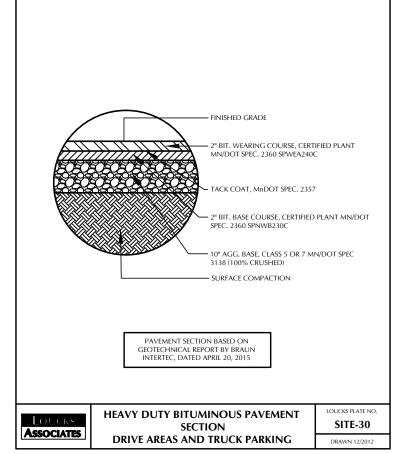


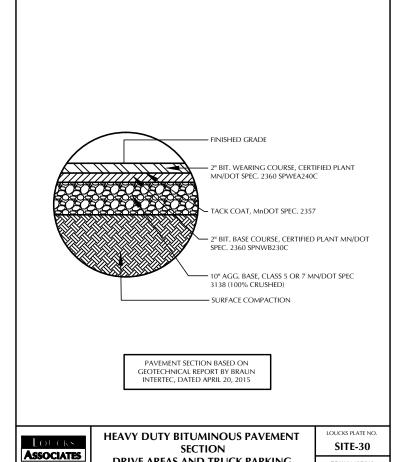


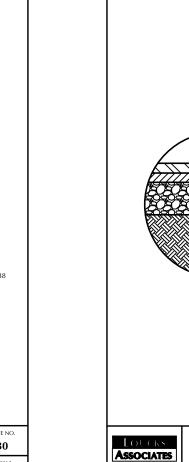


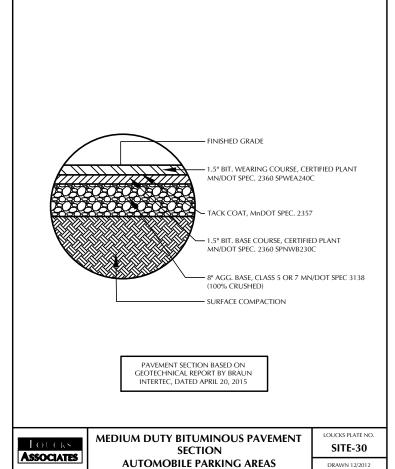


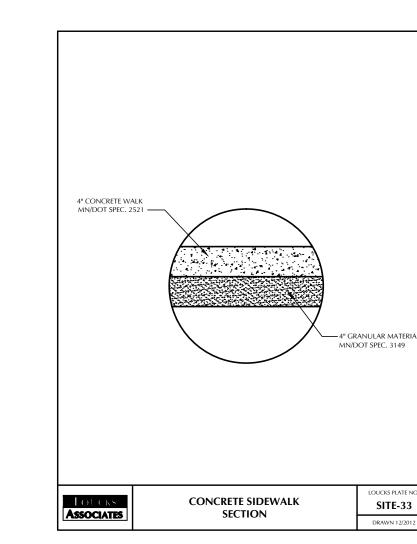










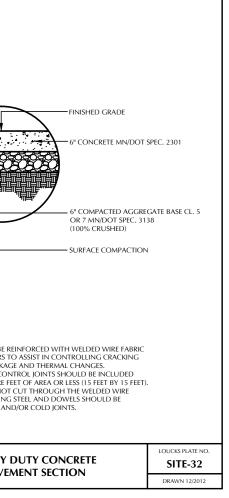


BREAKOUT TOP HALF PIP

NOTES:

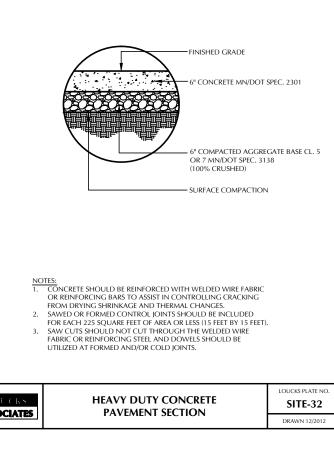
- NO LIFT HOLES ARE ALLOWED IN MANHOLES LESS THAN 60" IN DIA.

- FOR MH'S IN DRIVE LANES, ROTATE COVER SO THAT CASTING IS OUT OF WHEEL PATH, AS APPROVED.



— 2" (50mm) ADJUSTING RINGS (MNDOT SP 4010G) AS NEEDED, 4" (100mm) MIN. TO 12" (305mm) MAX., SET EACH RING IN 1 FULL BED OF MORTAR

(305mm) TOP SECTION REQUIRED

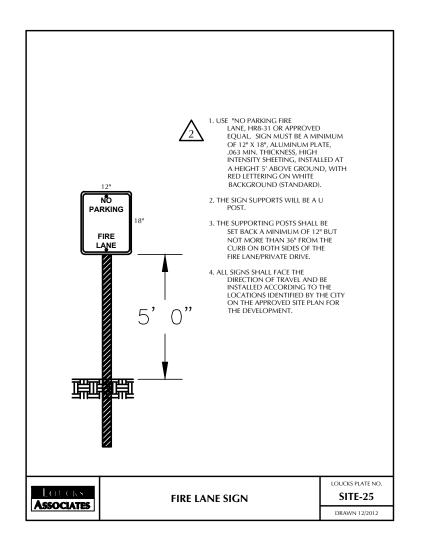


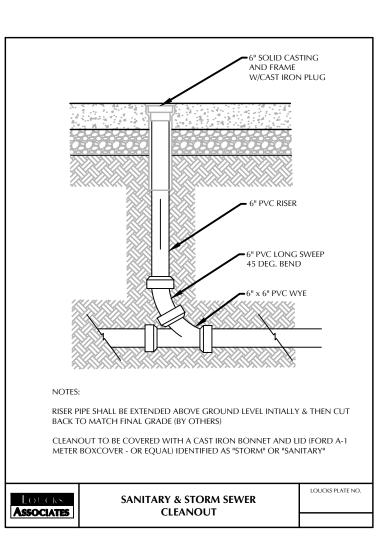
PIPE BEDDED IN GRANULAR BEDDING TO DEPTH OF 5 INCHES. BACKFILL COMPACTED TO FINISHED GRADE.

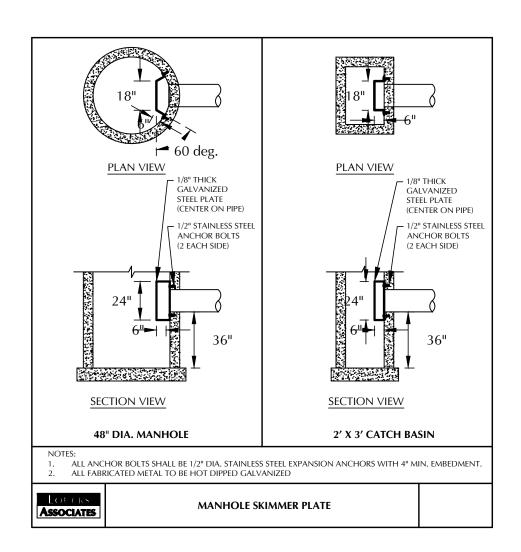
PIPE BEDDING DETAIL

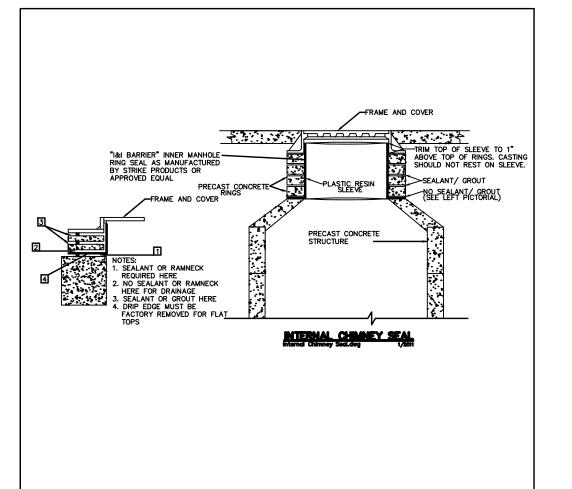
COVER WITH 2'x 3' (610mm x 915mm) RECTANGULAR OPENING" IN CENTER (MM/DOT SP 40206), ALIGN OPENING TO PROPOSED CURB & GUTTER

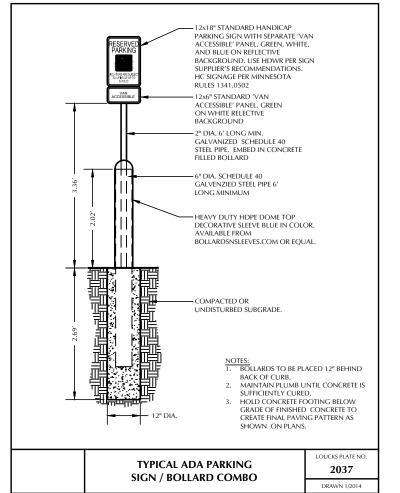
4011E) PLACED ON 3" (76mm)
CAST IN PLACE CONCRETE OR
8" (203mm) POURED CONC.
BASE ON UNDISTURBED EARTH

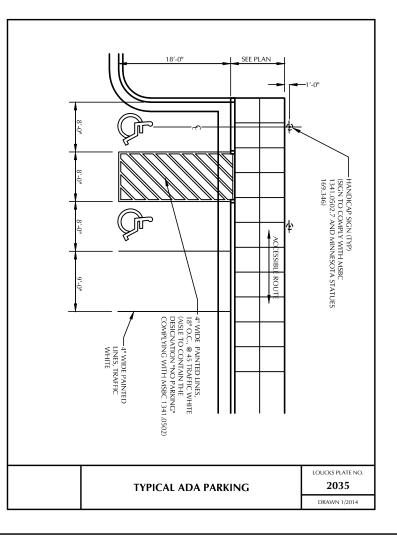










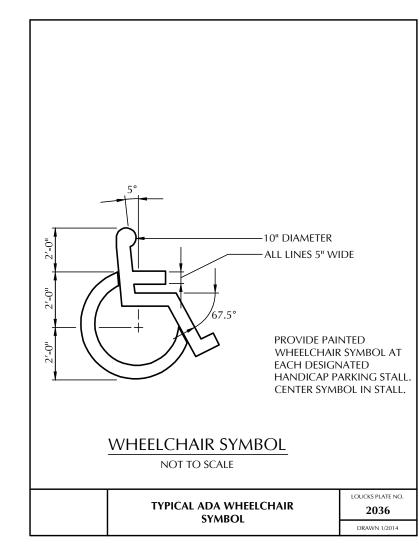


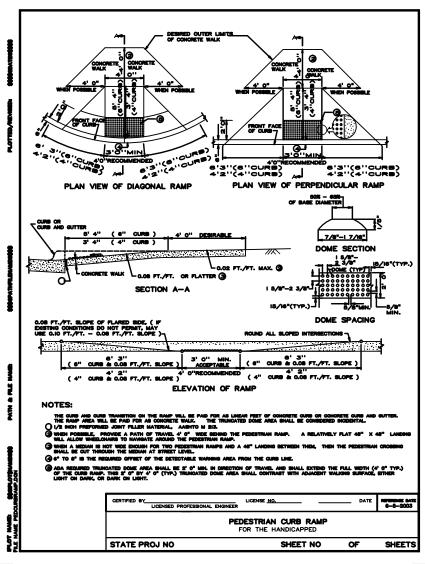
Top View

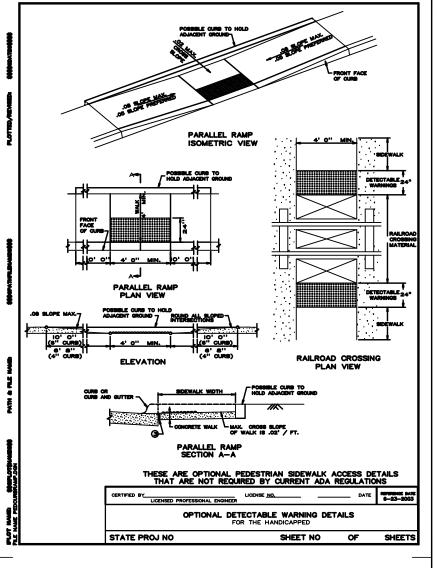
24" Baffle

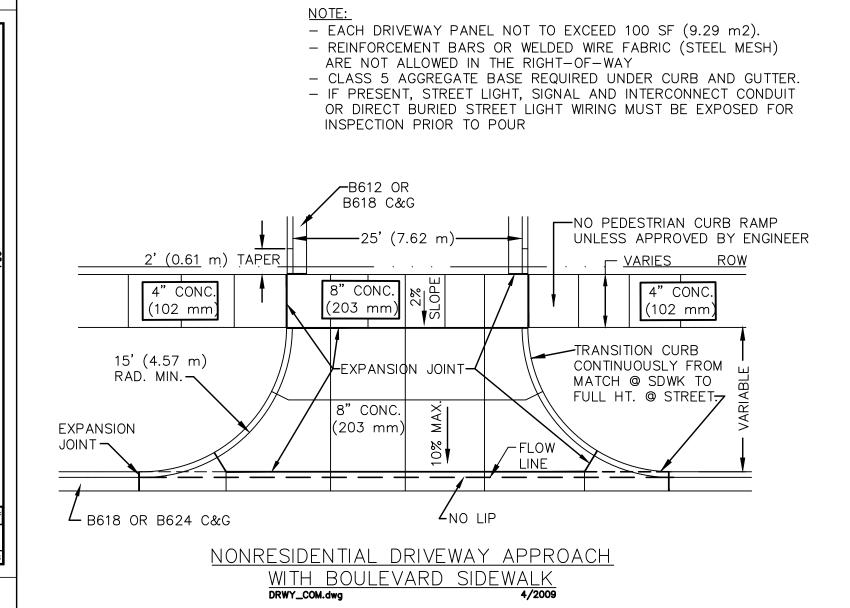
Section A-A

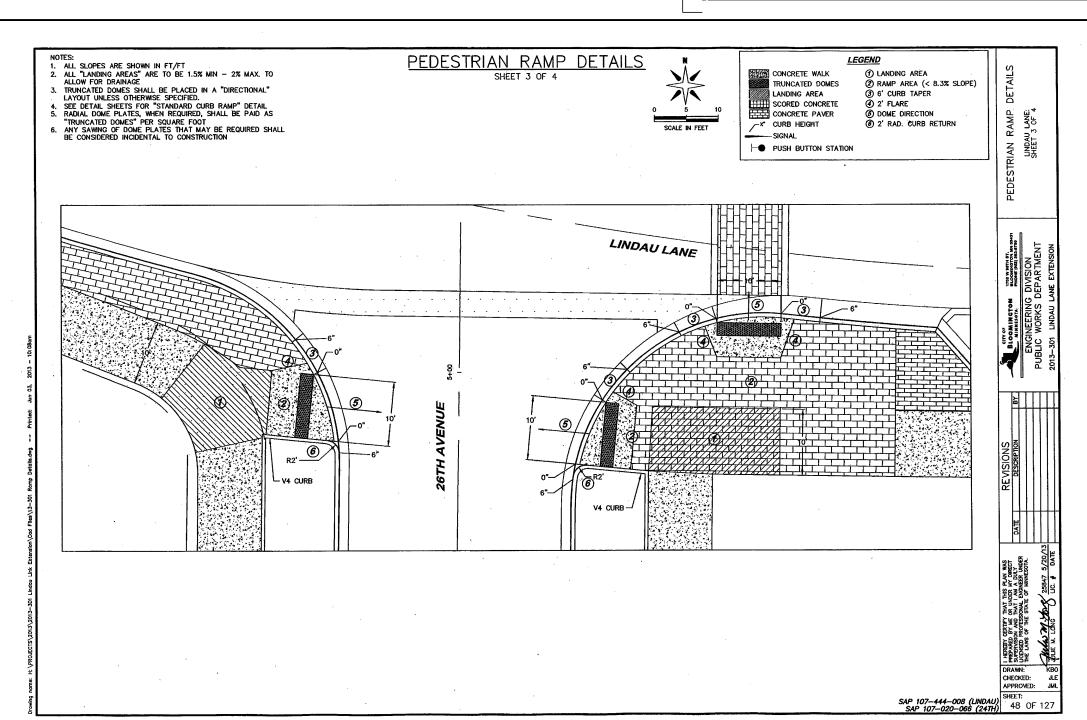
Notes:
Concrete - 5000 PSI
Joint Sealant - High Grade EZ-Stick
Labels - Warning signs located on all manholes
Installation - See separate installation guide
Baffles Installed
Rubber Gaskets - Press Seal
Tank Designed To ASTM C-1227-90 and ASTM 1613-06

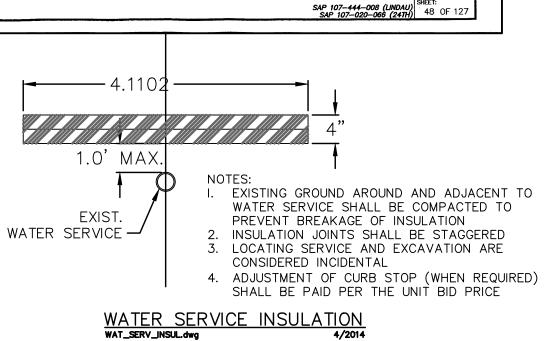


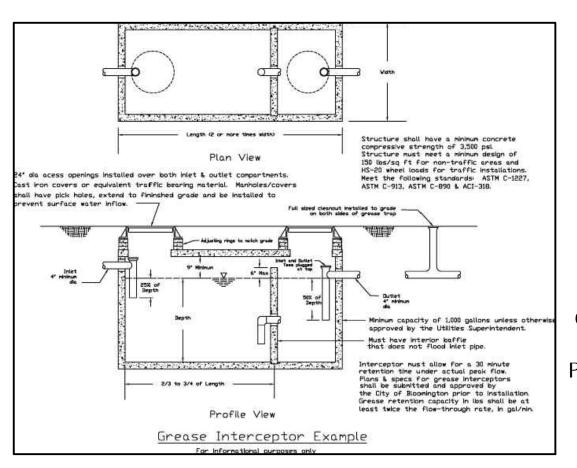


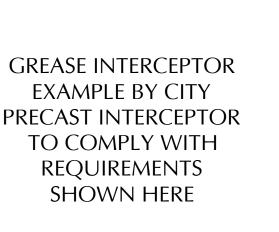














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SUBMITTAL/REVISIONS
4-28-16 CITY SUBMITTAL

DRC SUBMITTAL

05-11-16

3000 GALLON GREASE 44" LL 50" INLET

Section B-B

MODEL 3000-0

, 1" x 3/4"

Typical Cover

End View

Crest Precast, Inc.

La Crescent, MN & Barneveld, WI 800-658-9045

I hereby certify that this plan, specification or report was prepared by me or under my direct supervision and that I am a duly Ligensed Professional Engineer under the laws of the \$tatle of Minnesota Nicholas M. Mannnel - PE License No. 45861

Date 05-11-16

Date 05-11-16

QUALITY CONTROL

Loucks Project No. 14672B

Project Lead NMM

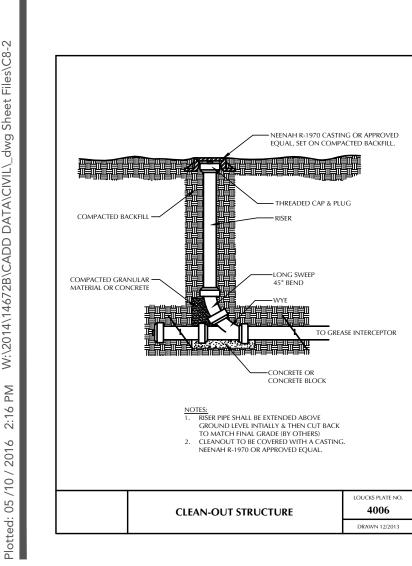
Drawn By TRG

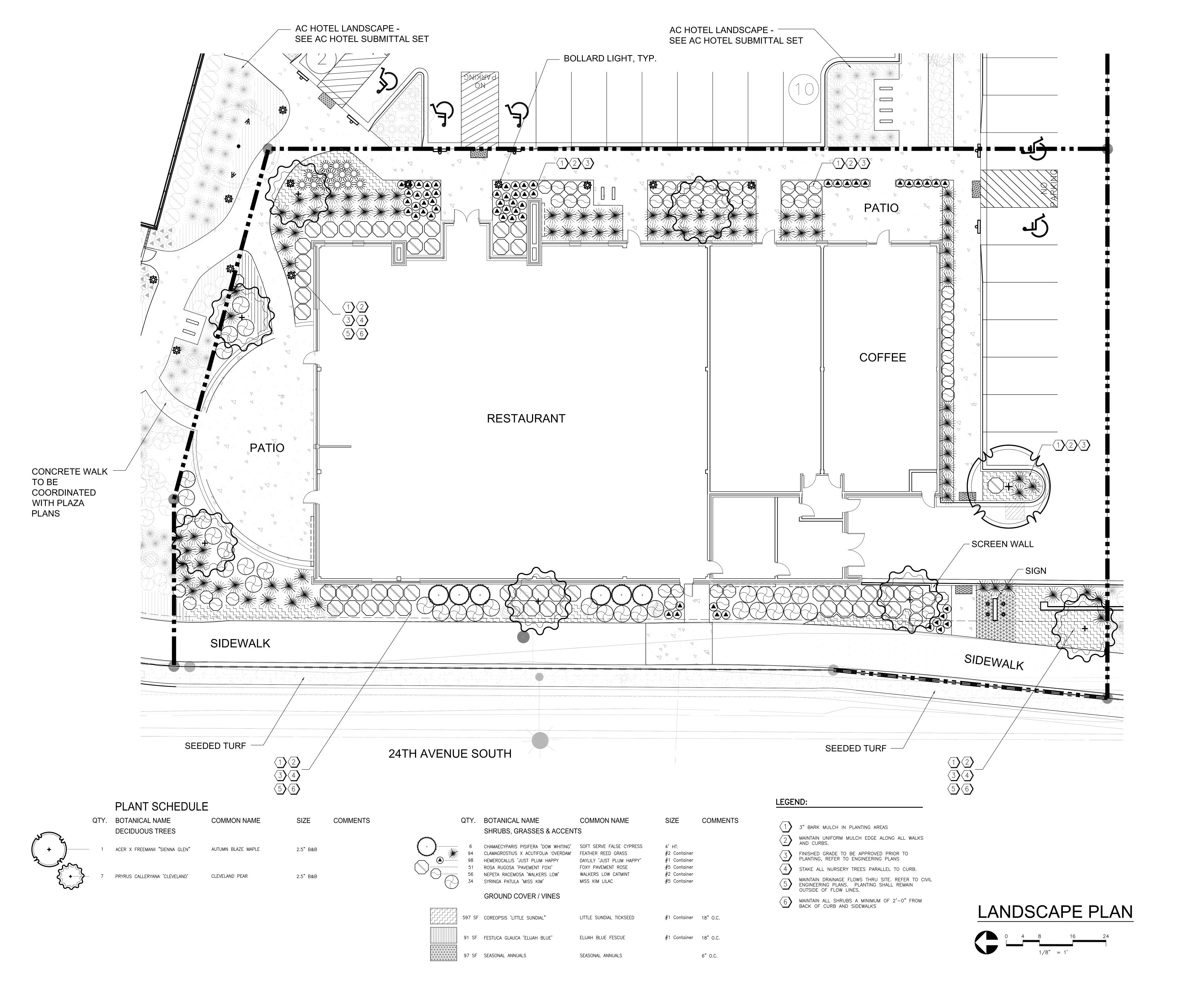
Checked By TDG

Review Date 05-11-16

C2-1 SITE PLAN
C2-2 OVERALL SIGNAGE PLAN
C3-1 GRADING & DRAINAGE PLAN
C3-2 SWPP PLAN
C4-1 UTILITY PLAN (SANI. & WATER)
C4-2 UTILITY PLAN (STORM)
C8-1 DETAIL SHEET
C8-2 DETAIL SHEET

DETAIL SHEET





ALPHA B
RESTAURANT –
MALL
OF AMERICA
Bloomington, Minnesota







Sheet Index:

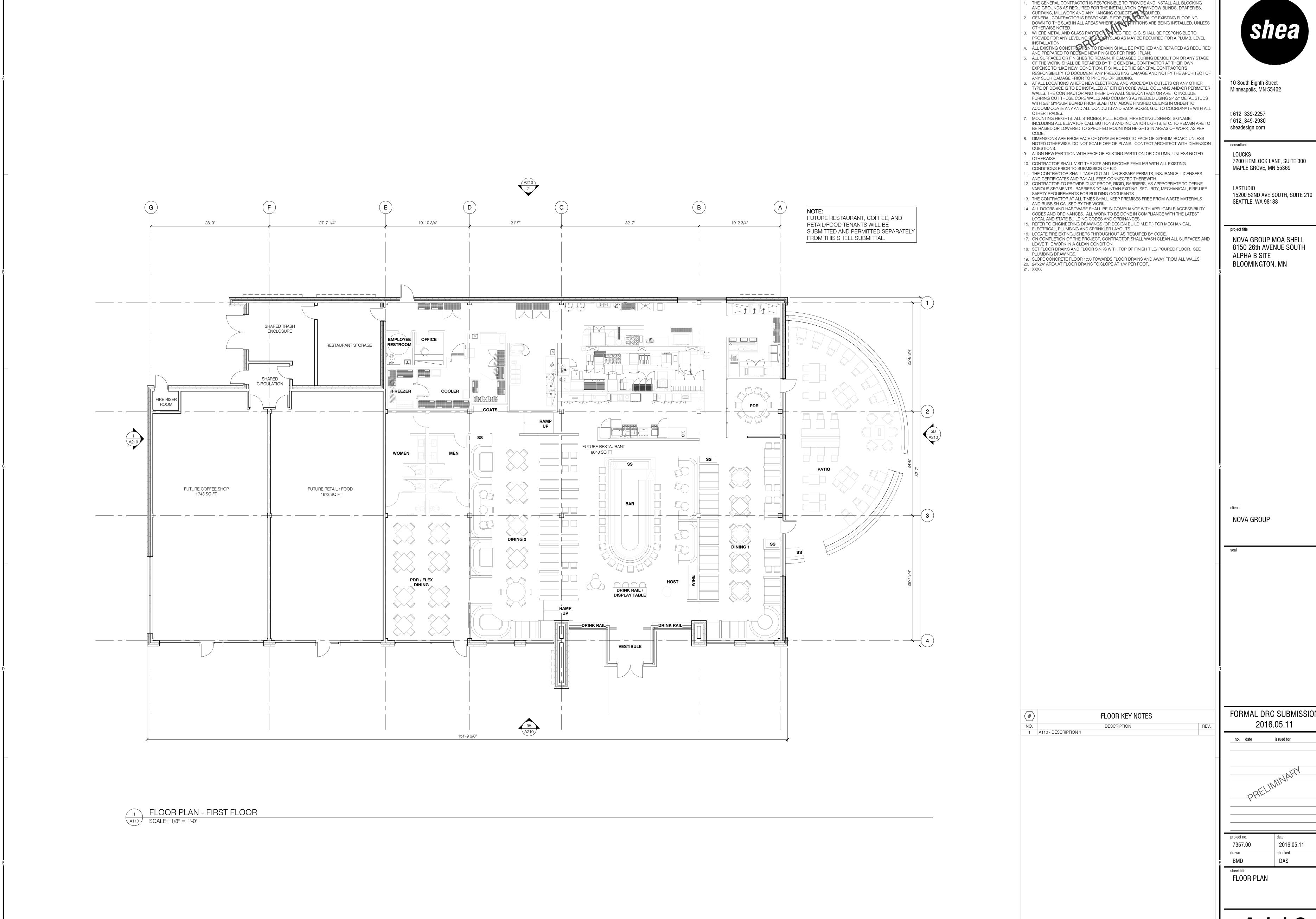
L 01 OVERALL LANDSCAPE PLAN

FORMAL DRC SUBMITTAL 05-11-16

	27/16 SIONS	
No. 1 2	Description DRC SUBMITTAL FORMAL DRC SUBMITTAL	Date 04/28/105/11/1
215 PROJEG MB DRAWI	CT NUMBER RS	

AC HOTEL BY MARRIOTT -MALL OF AMERICA

LANDSCAPE PLAN

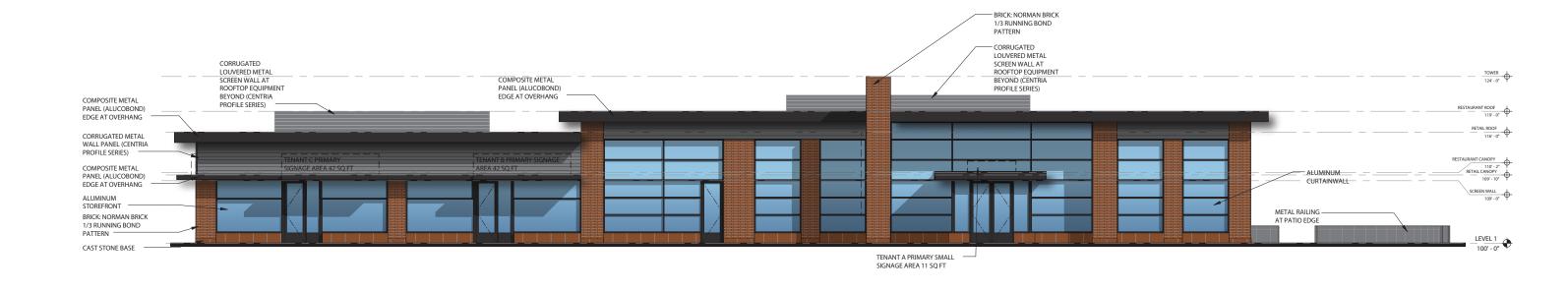


FLOOR PLAN NOTES

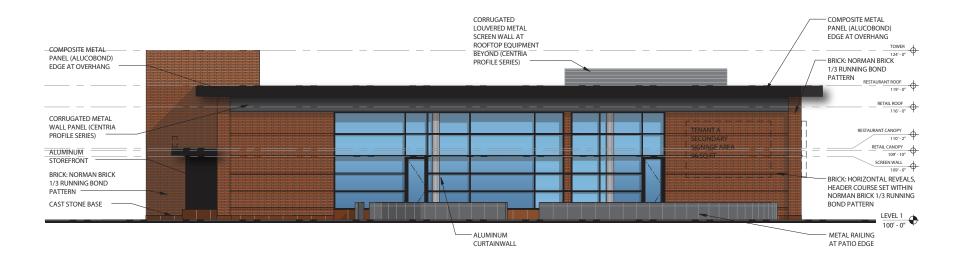
THE GENERAL CONTRACTOR IS RESPONSIBLE TO PROVIDE AND INSTALL ALL BLOCKING

FORMAL DRC SUBMISSION

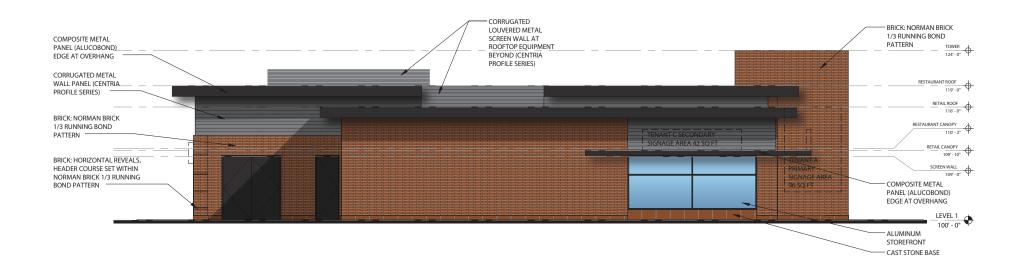
East Elevation



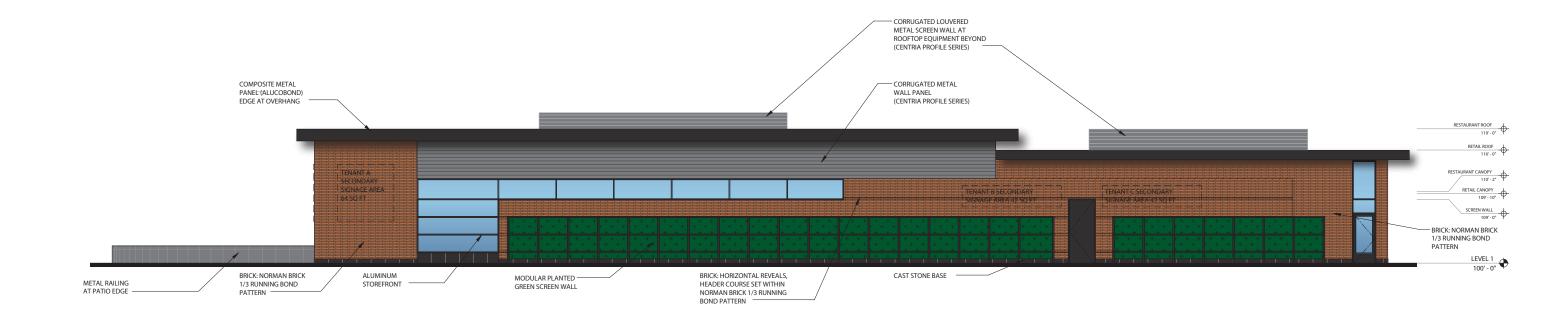
North Elevation

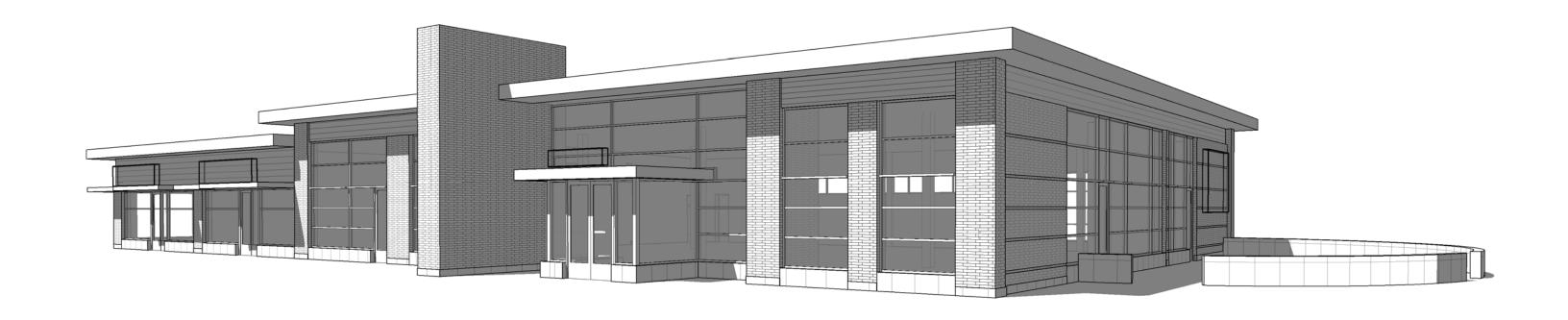


South Elevation

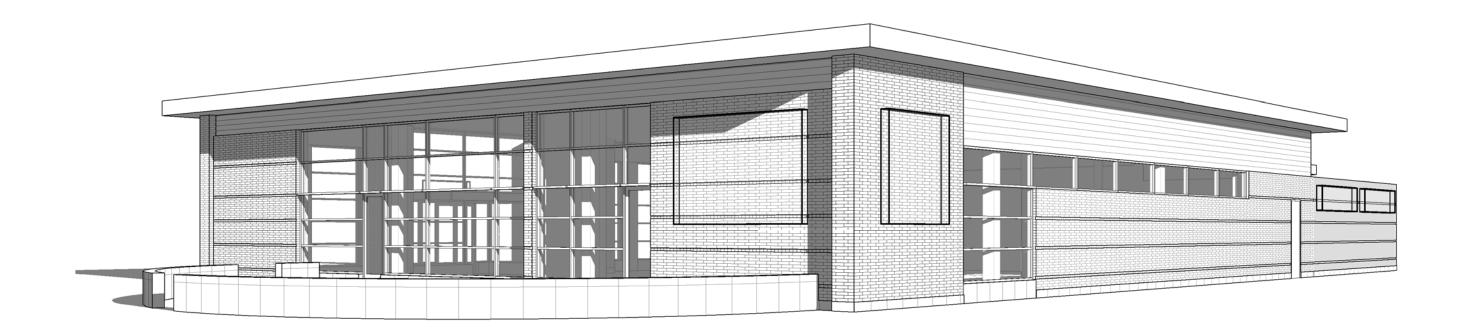


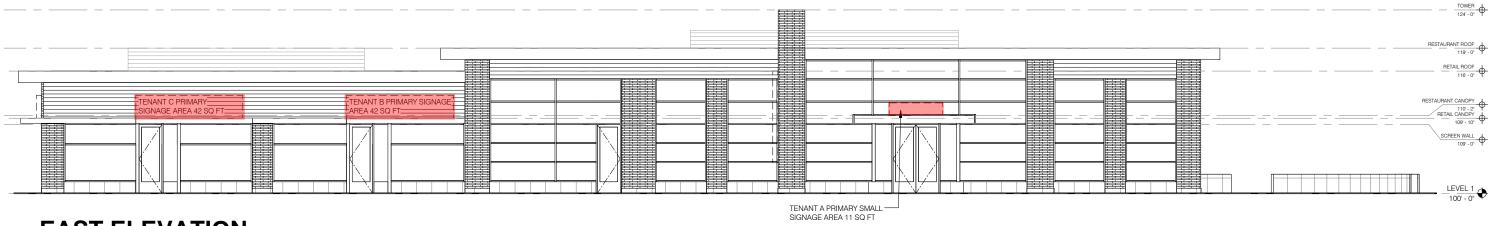
West Elevation



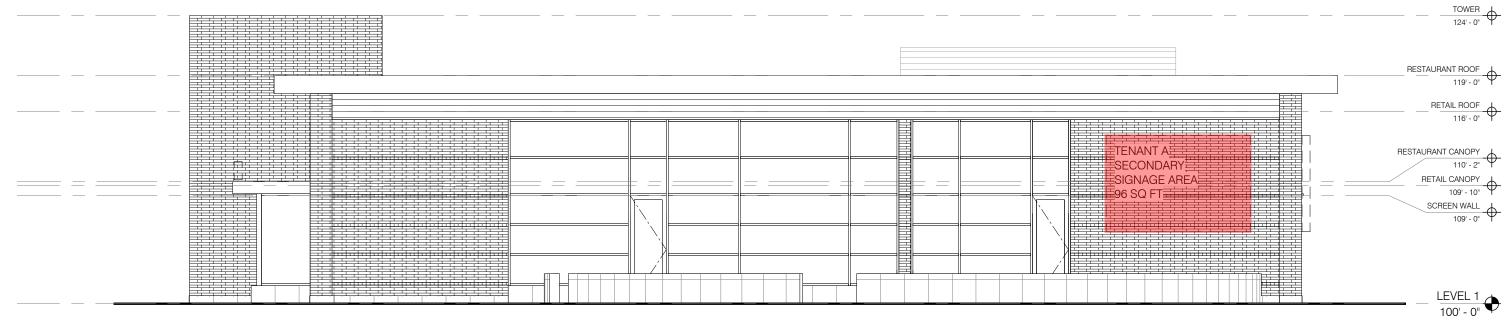




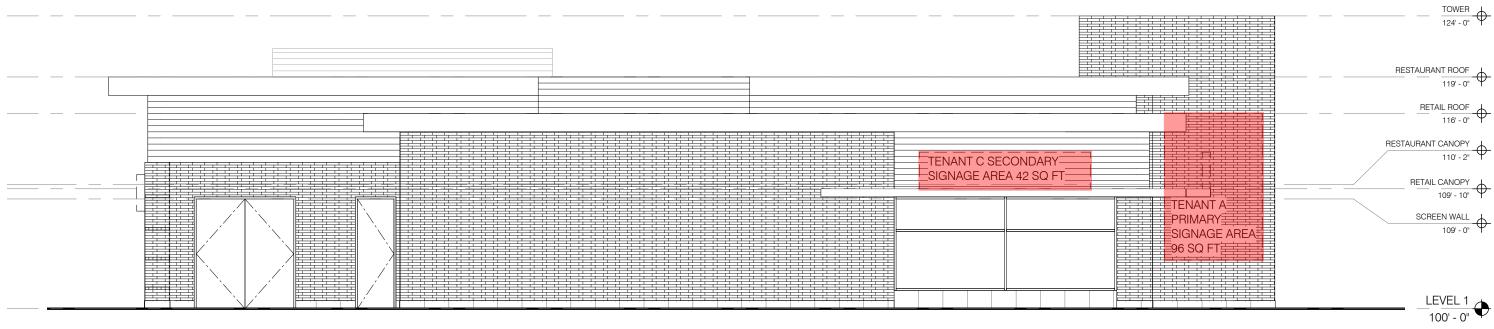




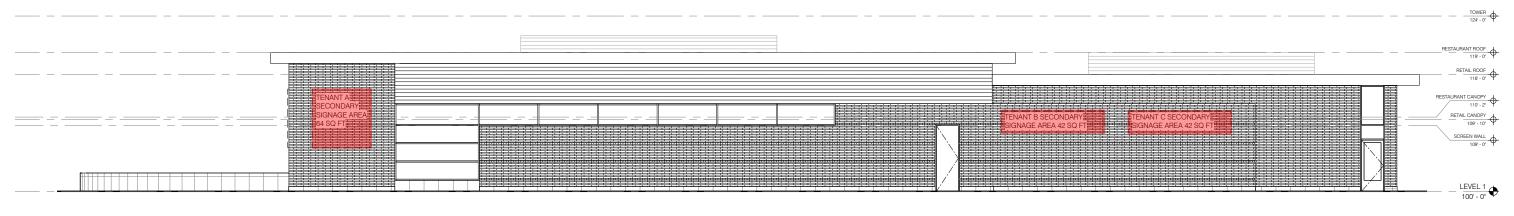
EAST ELEVATION



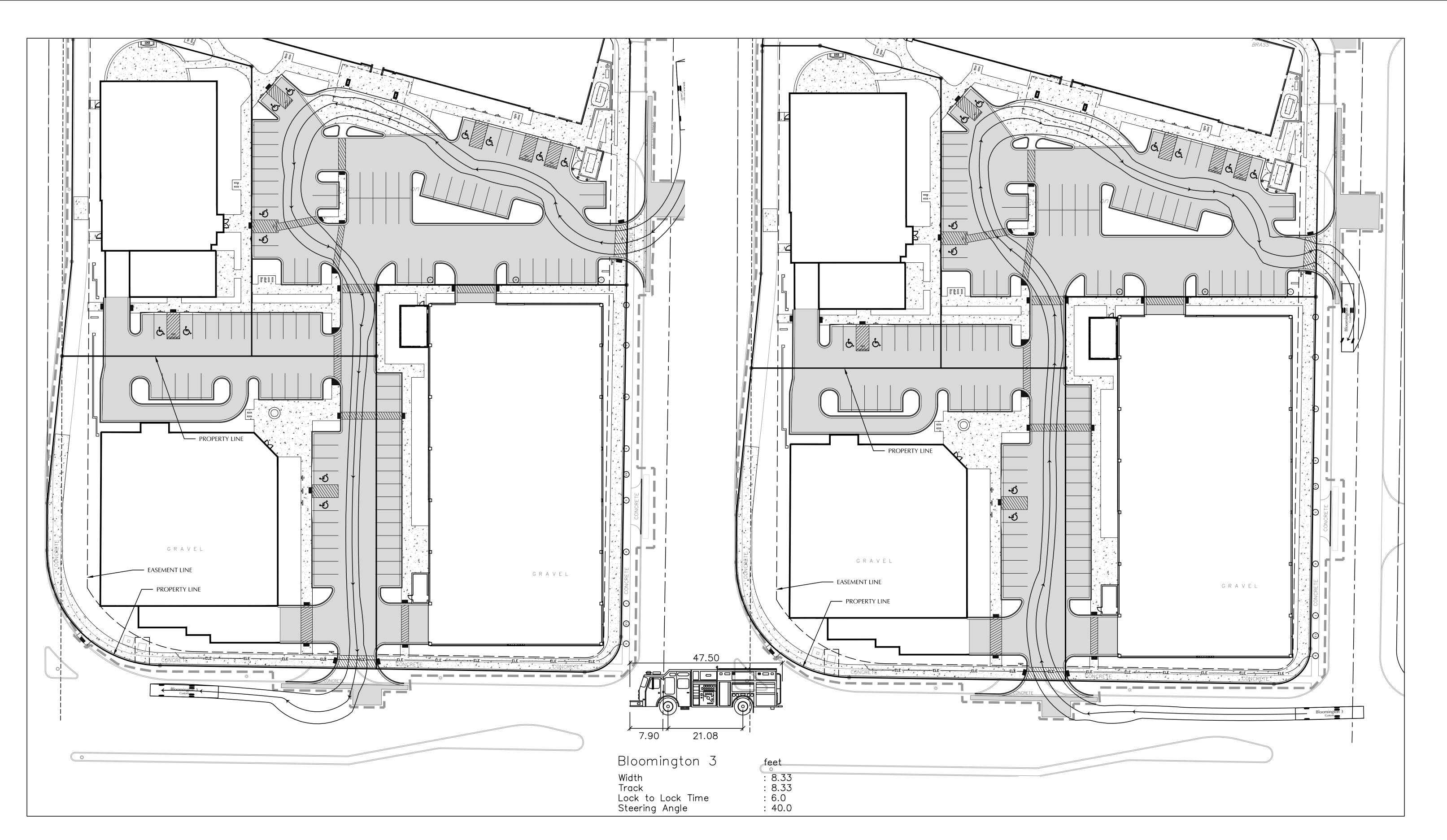
NORTH ELEVATION

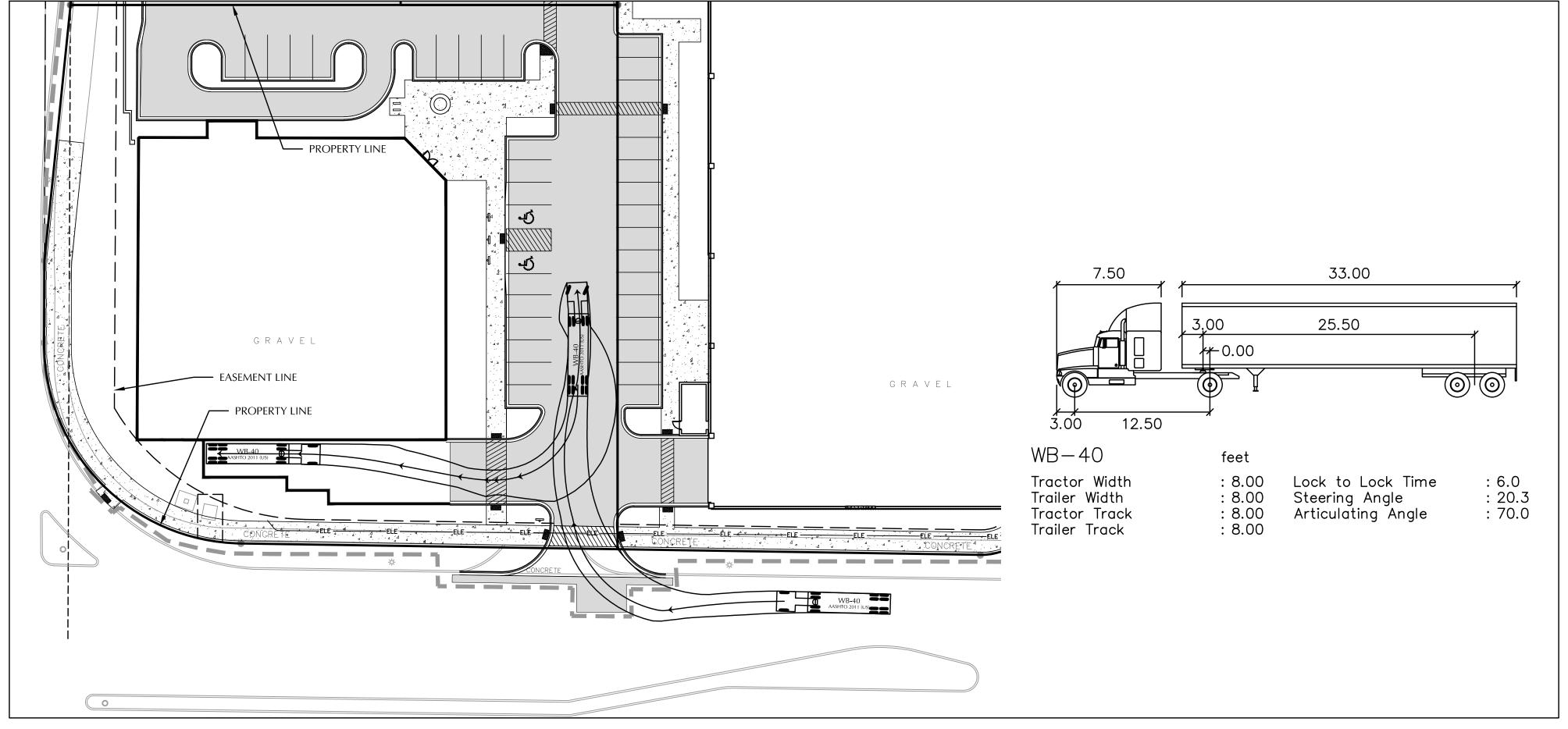


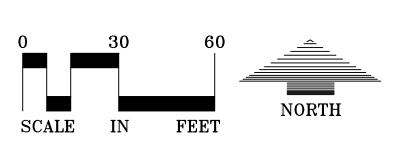
SOUTH ELEVATION



WEST ELEVATION







TOP NUT HYDRANT LOCATED IN THE NORTHWEST QUADRANT OF 26TH AVE. S. & 82ND ST. ELEVATION=809.17 FEET (NGVD 1929)

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AC HOTEL BY MARRIOTT - MALL OF AMERICA Bloomington, Minnesota





elness swenson graham architects 500 washington avenue south minneapolis minnesota 55415 p. 6 1 2 . 3 3 9 . 5 5 0 8 f. 6 1 2 . 3 3 9 . 5 3 8 2 w w w . e s g a r c h . c o m

LAND SURVEYING LANDSCAPE ARCHITECTURE ENVIRONMENTAL 7200 Hemlock Lane, Suite 300 Maple Grove, MN 55369 763.424.5505

CIVIL ENGINEERING

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I hereby certify that this plan, specification or report was

C0-1	COVER SHEET
1 OF 1	BOUNDARY & TOPOGRAPHIC SURVEY
<u>C1-2</u>	DEMOLITION PLAN
C2-1	SITE PLAN
C2-2	FIRE TRUCK MOVEMENT PLAN
C2-3	MASTER SIGNAGE PLAN
C2-4	PHASING PLAN
C2-5	UTILITY - TRAFFIC CONTROL PLAN
C2-6	SIDEWALK - TRAFFIC CONTROL PLAN

C3-1 GRADING & DRAINAGE PLAN C3-1A GRADING PLAN ENLARGEMENT C3-2 STORM WATER POLLUTION

PREVENTION PLAN

C4-1 UTILITY PLAN

C4-2 STORM SEWER PLAN

C8-1,2 DETAIL SHEETS

CONSTRUCTION SET 11-17-15

ORIGINAL ISSUE: 03/04/15

REVISIONS

No.	Description	Date
1	DRC SUBMITTAL	03/04/15
2	DRC RE-SUBMITTAL	03/12/15
3	SD SUBMITTAL	04/03/15
4	DD SUBMITTAL	05/27/15
5	SITE PRICING SET	06/17/15
6	DD - PARKING RAMP	07/07/15
7	RESPONSE TO DRC	07/10/15
	COMMENTS	
8	CONSTRUCTION	08/17/15
	DRAWINGS	
9	PERMIT SET	08/28/15
10	REVISED PERMIT SET	10/02/15
11	REVISED PERMIT SET	10/16/15
12	CONSTRUCTION SET	11/17/15
		-

LOUCKS #014672 ESG #215303

PROJECT NUMBER TRG DRAWN BY TDG CHECKED BY

KEY PLAN

AC HOTEL BY MARRIOTT -MALL OF AMERICA

TRUCK MOVEMENT PLAN